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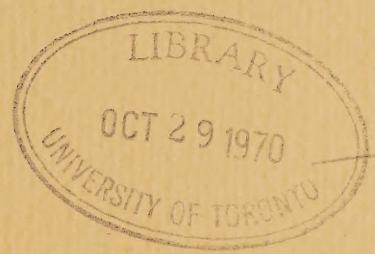
Ontario. Health dept. Research
and planning branch
Profiles: Health occupations

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ONTARIO DEPARTMENT OF HEALTH
Research and Planning Branch


PROFILES

Health Occupations



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PROFILES

HEALTH OCCUPATIONS



F O R E W O R D

The information profiles on 31 health science disciplines were prepared by the Research and Planning Branch of the Ontario Department of Health to serve as resource documents for the Council of Health and its associated committees. It is hoped that the descriptive and comparative data compiled for these disciplines will be of value to counsellors, educators and researchers in the field.

The profiles are uniform in format and design, each containing information on a given number of identical items. The information reflects, as accurately as possible, the present status of each discipline as of September, 1968. The materials were completed in draft by the Research and Planning Branch and edited by representative professionals closely identified with the individual disciplines. The reader is urged to consult authorities in individual health disciplines or the Ontario Department of Health for any recent amendments affecting bursary assistance, number and setting of programs, etc.

The portfolio may be considered representative of the field of health occupations, but is in no way intended to comprise a complete selection of all health science disciplines. Other profiles may be prepared at a later date, either independently or in response to committee or outside requests.

It is hoped that this document will foster closer communication between government agencies, teaching institutions and professional associations.

May, 1969.

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HEALTH SCIENCE DISCIPLINES:FORMAT DESCRIPTIONA. EDUCATION AND TRAINING

1. Length of educational program refers to instruction received in an educational institution or through any other formally organized program of study.

2. Length of training program includes internships (where applicable), informal on-the-job training, and apprenticeship type programs of instruction.

3. Kind of program information regarding degree, diploma or certificate awarded, if any.

4. Number and setting of programs total number of programs in Ontario. Setting (e.g. universities, schools of nursing, hospitals, laboratories, secondary schools, C.A.A.T. Colleges, etc.).

5. Availability of additional training possibility of obtaining advanced education and/or training; availability of refresher courses, advanced in-service training, special seminars, lectureships, etc.

6. Admission requirements qualifications required for admission as in items one and/or two above (educational level, age restriction if any, etc.).

7. Fees amount of the academic fee for educational and/or training program(s). (range stated).

8. Bursary assistance general listing of bursary assistance available on basis of demonstrated financial need. Scholarships competed for on the basis of academic performance only are NOT listed. Section includes information on salaries paid to trainees, and stipends paid to students, when such payment is made unconditionally to all trainees or students.

B. OCCUPATIONAL STATUS**1. Manpower data (est.)**

estimate of number of people actively employed in the occupation as of fall - winter 1968. Estimates of annual infusion and attrition rates included where available.

2. Place of employment

locale in which persons employed in the occupation are most likely to perform duties (e.g. hospitals, private offices, laboratories, clinics, etc.).

3. Primary function

brief, general statement of most frequently performed duties and most important functions.

4. Basis of employment

relationship to supervisory and/or medical personnel; degree of functional autonomy; relationship to patient.

5. Initial salary range

refers to salaries received by fully qualified personnel without previous experience in the occupation or profession.

6, 7, 8. Certification, registration and licensing

information includes (where available) issuing body, name of registration or licensing act, regulatory definition, basis of certification, registration and/or licensing (whether optional or mandatory).

9. Professional organization

name of voluntary professional organization(s) to which qualified personnel may belong.

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SUMMARY**A. EDUCATION AND TRAINING**

1. Length of educational program

may be 2, 2 + 1, 3 or 4 years.

2. Length of training program

final year of 2 + 1 program is hospital internship.

3. Kind of program

diploma or degree (B.Sc.N.) leading to registration (R.N.)

4. Number and setting of programs

83 programs in Ontario, in universities, regional schools, hospital schools and independent schools (see Appendix I (Nursing))

5. Availability of additional training

graduates from degree programs may proceed to Master's and Doctoral degrees. Graduates of diploma schools meeting university entrance requirements may proceed to B.Sc.N. and graduate degrees. Certificates of specialization also available (e.g. in Public Health Nursing). Refresher courses available through universities and R.N.A.O.

6. Admission requirements

for diploma schools of nursing, Ontario grade 12 or equivalent; for university schools of nursing, Ontario grade 13 (4 subjects comprising 7 credits) or admission on maturity clause.

7. Fees

hospital schools - none; independent schools - from \$140.00 per year; university schools - \$486.00 - \$565.00 per academic year.

8. Bursary assistance

bursary assistance available to students in university programs (see Appendix II (Nursing)) and to students in Ryerson program. Bursary assistance not required in other programs, where students are provided with room and board and/or monthly stipends. (see detail)

B. OCCUPATIONAL STATUS

1. Manpower data (est.)

number employed - 34,000 (full and part-time).

average annual infusion - 4,500

average annual attrition - 10%

2. Place of employment

large majority employed in hospitals and other institutions; some employed in private practice, or physicians' offices. Approximately 50% of baccalaureate degree nurses employed in schools of nursing and community health agencies.

3. Primary function

identifies need for and gives nursing care; gives medications and treatments prescribed by the physician; observes and reports on patients; maintains records.

4. Basis of employment

functions within policies of the employing organization and under nursing supervisor; gives nursing care and carries out the physician's orders regarding the patient.

5. Initial salary

minimum salary \$5,340.00 per annum for diploma nurses and \$6,300.00 per annum for baccalaureate nurses.

6, 7, 8. Certification, registration and licensing

registration mandatory under The Nurses Act. Jurisdiction of the College of Nurses of Ontario. No licensing.

9. Professional organization

registered nurses may belong to the Registered Nurses Association of Ontario, and through it the Canadian Nurses' Association and the International Council of Nurses.

DETAILA. EDUCATION AND TRAINING

The length of the educational program required for registration as a nurse in Ontario varies from two to four years. Programs leading to a diploma in nursing are usually three years in length; a few schools, however, offer a two-year program leading to registration. Programs at university schools of nursing are of four years' duration and lead to a degree (B.Sc.N.) rather than a diploma.

In total, there are 83 schools of nursing in Ontario which offer nursing programs approved by the Council of the College of Nurses under the Nurses Act (1961-1962). 76 are diploma schools, and 7 are university schools offering degrees. For details regarding the types of programs offered by the various kinds of schools, see Appendix I (Nursing).

Admission to a diploma school of nursing requires the completion of Ontario grade 12 or equivalent (options to include Grade 10 Mathematics, and science including Chemistry and one of Physics or Biology) while admission to a university school of nursing requires completion of Ontario grade 13 (4 subjects comprising 7 credits). Admission may be granted on a maturity clause to students over a stated age (variable among universities) who have an acceptable academic record and standing in at least one grade 13 subject.

There are no fees for the three-year diploma courses in nursing. The two year programs offered by independent schools charge fees ranging upwards of \$140.00 per year. Fees for baccalaureate degree programs range from \$486.00 to \$565.00 per academic year.

Additional education and training for nurses is available at Ontario universities. Diploma-holders who meet university entrance requirements may proceed toward a B.Sc.N. degree at any of 6 Ontario universities. Nurses having degrees may proceed toward Master's and Doctoral degrees. A certificate of specialization in Public Health Nursing and Nursing Education is also available to registered nurses. As well as these advanced certificate and degree programs, non-credit and refresher courses are offered to registered nurses by Ontario universities and the Registered Nurses' Association of Ontario.

Bursary assistance is available to students in baccalaureate programs. For details, see Appendix II (Nursing). Students in diploma programs do not usually require bursary assistance. Room and board is provided for students in the three-year traditional hospital programs, the two-year hospital programs, the two-year independent programs (excepting the program at Ryerson Polytechnical Institute) and in the first two years of the two plus one programs. In addition to this, financial assistance of up to \$15.00 per student per month is allowed in all traditional three-year programs. In two plus one programs, the student is paid up to \$300.00 per month during the last (internship) year of the program. No stipends are offered to students in the two-year programs, although bursary assistance is offered by Ryerson Polytechnical Institute to its students in the Nursing Program on the basis of financial need. In the three psychiatric hospital schools, \$50.00 per month is paid to students during the first two years, and \$285.00 per month is paid during the third year.

B. OCCUPATIONAL STATUS

There are an estimated 34,000 registered nurses (full and part-time) presently employed in Ontario (September 1968). Of these, approximately 2,012 are nurses prepared at the baccalaureate level and the remainder (excepting a small number of nurses with advanced degrees) are diploma nurses. The average annual infusion into the nursing profession is approximately 4,500 (100 from university schools of nursing; 2,400 from other schools of nursing; and 2,000 from immigration). The average annual attrition is estimated to be 10%.

Approximately 80% of registered nurses are employed in hospitals and other institutions such as nursing homes. Some are employed in private practice or in physicians' offices; and approximately one half of all basic baccalaureate degree nurses are employed in schools of nursing and community health agencies.

The registered nurse participates with other members of the health team in planning for total patient care needs. This includes assisting the individual in carrying out certain activities which, in optimum health, he carries out for himself, such as eating; eliminating; resting; sleeping; exercising; maintaining normal temperature, pulse and respiration; and hygienic, social, recreational and occupational activities.

The nurse is responsible for identifying nursing care needs, planning and giving care, alleviating suffering and stress, and giving prescribed medications and treatments to assigned patients. She evaluates the effectiveness of the nursing care given, gives health teaching to patients, consults with other members of the health team, observes and reports on patients to appropriate personnel, and maintains the necessary records and reports. She may also be responsible for the supervision of auxilliary personnel (e.g. registered nursing assistants and nursing aides).

The registered nurse from the baccalaureate degree program has a foundation of knowledge in the humanities, social and biological sciences, and in nursing principles with application of these in the various clinical settings in hospitals and other health agencies. Following an initial period of orientation, she is prepared to be a self-directing professional. She has the educational base and potential for leadership positions in the provision of nursing care (in the hospital, home and/or community health agencies) and in functional areas such as administration, supervision, consultation, and teaching.

The registered nurse from the diploma program is prepared for staff positions in any clinical setting in hospital or clinic. Through experience in nursing, in-service education and other educational programs, she may add to her knowledge and perfect her skills in specialized areas for nursing in hospitals and other health agencies, or for functional areas such as administration, supervision, consultation, and education.



The registered nurse employed in a hospital or other health agency works within the administrative framework of the agency. She functions within the policies of the employing organization, carries out the physicians' orders, and renders service directly to her patients. The registered nurse may be self-employed (as, for example, in private duty nursing), in which case she is responsible for the nursing care of the patient and for carrying out the physician's orders and consulting with and reporting to him with regard to the patient's progress and needs.

The registered nurse holding a diploma may expect to receive a minimum annual salary of not less than \$5,340.00. The registered nurse holding a baccalaureate degree may expect to receive a minimum salary of not less than \$6,300.00 per annum.

Registration of nurses employed in Ontario is mandatory under The Nurses Act, and is the jurisdiction of the College of Nurses of Ontario. There is no licensing of nurses in Ontario.

The voluntary professional organization to which registered nurses in Ontario may belong is the Registered Nurses Association of Ontario. Through the R.N.A.O. membership is also acquired in the Canadian Nurses' Association and the International Council of Nurses.

REGISTERED NURSE (PSYCHIATRIC)SUMMARYA. EDUCATION AND TRAINING

1. Length of educational program 2, 3 or 4 years depending on course.

2. Length of training program N/A. Training received as part of educational program.

3. Kind of program diploma or degree programs leading to registration.

4. Number and setting of programs 83 programs in Ontario in universities, regional schools, hospital schools and independent schools (see Appendix I, Nursing) for details.

5. Availability of additional training 15 week certificate course in psychiatric nursing (Ryerson); in-service psychiatric training programs in most Ontario Psychiatric Hospitals.

6. Admission requirements for diploma schools of nursing, Ontario grade 12 or equivalent; university schools of nursing, Ontario grade 13 (4 subjects; 7 credits) or admission on maturity clause.

7. Fees diploma schools - none; independent schools - from \$140.00 per year; university schools - \$486 - \$565 per academic year.

8. Bursary assistance see Appendix II (Nursing). Bursary assistance not required in diploma programs where students are provided with room and board for two years. Monthly stipends of up to \$15.00 provided to students in 3 year programs. Stipends of up to \$300.00 per month to students during internship year.

B. OCCUPATIONAL STATUS

1. Manpower data (est.)

number employed - 300

2. Place of employment

psychiatric hospitals; psychiatric wards of general hospitals; mental health clinics; public health departments.

3. Primary function

professional members of psychiatric treatment team. Creates a therapeutic environment; observes and communicates patients' symptoms to physician etc; co-operates in organizing social and recreational activities; aids in supervision and physical treatment of patients.

4. Basis of employment

renders direct service to patients. May work under direction of a physician and/or within policies of employing organization.

5. Initial salary

minimum \$5,340.00 per annum for diploma nurses and \$6,300.00 per annum for baccalaureate nurses.

6, 7, 8. Certification,
registration and
licensing

registration mandatory under The Nurses Act. Jurisdiction of the College of Nurses of Ontario. No licensing.

9. Professional organization

Psychiatric Nurses' Association of Ontario; Registered Nurses' Association of Ontario; Canadian Nurses' Association; International Council of Nurses.

DETAILA. EDUCATION AND TRAINING

In Ontario, the "psychiatric nurse" is a registered nurse with psychiatric training which she has acquired in her work setting. There are an estimated 300 psychiatric nurses employed in Ontario at present (September 1968). While there are specific programs for the training of psychiatric nurses in Canada's western provinces, no such programs are offered in Ontario. Some Ontario schools of Nursing, however, place more emphasis on training and instruction in psychiatric nursing than others, and students wishing to enter this area of nursing practice would be advised to seek out a school of nursing offering this emphasis.

Most psychiatric hospitals offer orientation programs for new staff members which provide formal instruction and supervised practice in psychiatric nursing. Psychiatric services are integrated into general health services, but nursing education programs appear to be giving increasing emphasis to psychiatric training. Policy statements of the R.N.A.O. and the C.N.A. indicate the ideological basis for this integrated program:

"Since our philosophy urges considering the patient as a whole, then psychiatric nursing is an integral part of nursing".

R.N.A.O. (1967)

"Basic programs should be general rather than specialized. The C.N.A. recommend that mental hospitals be encouraged to enlarge and extend their teaching programs to include, through affiliation, experience in psychiatric nursing for all nursing students."

C.N.A.

Thus, the training of nurses for work in psychiatric settings is, in Ontario, integrated into the total educational-training program of all registered nurses. For details regarding length, number and setting of programs, admission requirements, fees, etc., see the information profile on "Registered Nurse".

Additional training is available to registered nurses who wish to work in psychiatric settings. Ryerson Polytechnical Institute offers a 15 week certificate program in psychiatric nursing to registered nurses; and in-service education is available in psychiatric and general hospitals in Ontario.

B. OCCUPATIONAL STATUS

The registered nurse working in the mental health field may be employed in a psychiatric hospital, on the psychiatric ward of a general hospital in a mental health clinic or with a department of public health.

She is a professional member of a psychiatric treatment team which may include a psychiatrist, psychologist, social worker, public health nurse, other nurses and/or nursing assistants, and an occupational therapist. As a member of this treatment team, one of the primary functions of the psychiatric nurse is to provide a hospital environment which meets the patient's needs, and to provide a therapeutic atmosphere which is conducive to mental health. To create this atmosphere she should be able to establish a warm, accepting relationship with her patients, to inspire their trust in her, and to communicate to them her genuine interest in their welfare. To be of assistance to other team members the psychiatric nurse should also be able to observe and interpret patients' symptoms and communicate her observations to other team members in adequate terms. She is also responsible for carrying out the tasks of the general duty nurse which relate to the physical care of her patients.

The psychiatric nurse, like the general duty nurse renders direct assistance to her patients. She works under the direction, but not under the direct supervision, of a physician, and functions within the policies of the employing organization.

The minimum recommended salary for the registered nurse working in a psychiatric setting is the same as that recommended for the general duty nurse (i.e. \$5,340.00 per annum for diploma, and \$6,300.00 per year for degree nurses).

As there is no prescribed education or training for the psychiatric nurse in Ontario beyond the basic nursing program, the psychiatric nurse is registered only under the general terms of the Nurses Act. Registration is the jurisdiction of the College of Nurses of Ontario. To be registered, the nurse is required to complete a nursing program at an approved school of nursing, and pass an examination set by the College of Nurses. She is not licensed or certified specifically as a psychiatric nurse, although she may belong to the Canadian Psychiatric Nurses Association (Ontario Branch) as well as the Registered Nurses Association of Ontario and through it the Canadian Nurses Association and the International Council of Nurses.

SUMMARY

A. EDUCATION AND TRAINING

1. Length of educational program

may be 3, 4, 5 or 6 years depending on the course of study.

2. Length of training program

not applicable

3. Kind of program

- 1) basic baccalaureate degree
- 2) post-diploma baccalaureate degree.
- 3) post-diploma certificate in public health nursing

4. Number of programs in Ontario

- 1) Certificate in public health nursing - 3 universities
- 2) basic baccalaureate degree including preparation in public health nursing - 7 universities.
- 3) post-diploma baccalaureate degree - 6 universities.

5. Availability of additional training

refresher courses, in-service education, Master's and Doctoral degrees.

6. Admission requirements

diploma schools of nursing: minimum Ontario Grade 12 or equivalent; university schools of nursing Ontario Grade 13 (4 subjects comprising 7 credits) or admission on maturity clause

7. Fees

- 1) certificate course - \$506-\$535 per year
- 2) basic baccalaureate - \$486-\$565 per year
- 3) post (R.N. Diploma) baccalaureate - \$506-\$565 per year

8. Bursary assistance

See appendix II (Nursing)

B. <u>OCCUPATIONAL STATUS</u>	
1. Manpower data (est.)	number employed - 2,000
2. Place of employment	health departments, health units, visiting nursing associations, occupational health, schools of nursing.
3. Primary function	family health teaching and counselling in homes, schools and clinics; case finding and nursing care in the home.
4. Basis of employment	functions within policies of employing agency, under nursing supervisor and in consultation with family physician.
5. Initial salary	minimum \$6,000.00 per annum.
6, 7, 8. Certification, registration and licensing	registration mandatory under The Nurses Act. Jurisdiction of College of Nurses of Ontario. Public Health preparation required under regulations of the Public Health Act. No licensing.
9. Professional organization	Registered Nurses' Association of Ontario, and through its membership in Canadian Nurses Association and International Council of Nurses. Ontario Public Health Association and through its Canadian Public Health Association.

DETAILA. EDUCATION AND TRAINING

In Ontario the public health nurse is a registered nurse who may become prepared in one of three possible ways. She may select a four-year program at an approved university school of nursing of which there are seven in Ontario (McMaster, Western Ontario, Ottawa, Windsor, Lakehead, Laurentian, Toronto). Upon completing requirements of the course she will receive a B.Sc.N. degree which qualifies her as a public health nurse and permits her to write the registration examinations set by the College of Nurses. Or, she may take a nursing course at an approved school of nursing consisting of either a three year, a two plus one, or a two year program. Successful completion of a program entitles the nurse to write the registration examinations set by the College of Nurses. To qualify as a public health nurse, she must then take either a one-year certificate course in a university school of nursing or baccalaureate preparation for the registered nurse.

Thus the public health nurse will have received either (a) a basic B.Sc.N. degree from one of seven universities or (b) a post-diploma B.Sc.N. degree from one of 6 university Schools of Nursing or (c) a certificate in public health nursing from the School of Nursing at either Ottawa, Windsor or Toronto University.

To be admitted to a University School of Nursing, one is generally required to complete four grade 13 subjects comprising at least 7 credits (with some specified subject requirements) and obtain an average of not less than 60 per cent. The registered nurse may be admitted to University on the maturity clause. Minimum admission requirement for diploma programs as set by the College of Nurses is Secondary School Graduation Diploma Grade XII. Individual schools may set admission requirements above the minimum.

Annual tuition for University schools of Nursing ranges from \$506.00 to \$565.00 per academic year.

Provincial bursaries are available to nurses holding diplomas or degrees who wish to take further study. For details see appendix II (Nursing).

B. OCCUPATIONAL STATUS

The public health nurse is an essential member of the health team, as are the physician, the sanitary inspector and others. She is a family health teacher. She visits in the home and in the school, organizes and interviews in child health conferences and clinics, plans and participates in group teaching. She gives nursing care in the home and shares in the rehabilitation of the sick, injured, handicapped and chronically ill. She is a link between hospital and home. She works with other community agencies and with civic groups, to promote the health of people of the community.

The public health nurse is registered under the provision of The Nurses Act of the province of Ontario. The College of Nurses is authorized under provincial legislation to deal with matters concerning the practice of nursing including registration. In Ontario, licensing is not required. Registered nurses in Ontario may become members of the Registered Nurses' Association of Ontario and through it members of the Canadian Nurses' Association and the International Council of Nurses.

Public Health nurses may become members of the Ontario Public Health Association and through it the Canadian Public Health Association.

The public health nurse may expect an annual salary of not less than \$6,000.00 per year.

REGISTERED NURSING ASSISTANTSUMMARYA. EDUCATION AND TRAINING

1. & 2. Length of educational and training program day courses 35 weeks; evening courses 12 months

3. Kind of program diploma

4. Number and setting of programs 55 approved training centres. (39 in hospitals + 10 secondary schools + 1 Canada Manpower Training Centre, + 5 Department of Health, Regional Centres

5. Availability of additional training none. R.N.A. diploma may not be used as credit toward R.N. diploma.

6. Admission requirements Grade 10 in four or five year program or Grade 8 if over 25 years of age.

7. Fees none

8. Availability and amount of bursary assistance none. Monthly stipend of \$70.00 per month (or \$10.00 per month and room and board) paid to each student.

B. OCCUPATIONAL STATUS

1. Manpower data (est.) number employed - 14,000
average annual infusion - 2,000
average annual attrition - 10%

2. Place of employment hospitals, public health and visiting nursing agencies, homes, nursing homes, industry, doctors' offices.

3. Primary function general nursing care in stable nursing situations; assisting R.N. in more complex situations (duties related to bathing, diet, simple treatment, care of surroundings, aid in emergency)

4. Basis of employment prescription by R.N. or physician; activities carefully supervised.

5. Initial salary range \$3,900 - \$4,400 per annum

6, 7 & 8 Certification, registration
and licensing

Registration examination set
by Ontario College of Nurses.
Registration must be renewed
annually.

9. Professional organization

Ontario Association of Registered
Nursing Assistants (O.A.R.N.A.)
organized under sponsorship of
R.N.A.O.

DETAILA. EDUCATION AND TRAINING

The Registered Nursing Assistant in Ontario is prepared in one of 55 Training Centres approved by the Council of the College of Nurses under the Nurses Act (1961-62). The diploma program may be completed in 35 weeks of full-time study or 12 months of evening study. It includes both theoretical and practical training in and teaching of elementary biology, bedside nursing, menu planning, cooking and serving diets, community health and first aid care.

There is no tuition fee for this course, and remuneration in the form of a monthly stipend is given to each student during the course (except when the courses are taken as a part of the grade 11-12 secondary school curriculum). In any Hospital which is approved by the College of Nurses of Ontario for conducting a program for R.N.A.'s the hospital pays each student \$70.00 per month or the equivalent (\$10.00 per month + room and board). Training centres for nursing assistants operated by the Ontario Department of Health allow a student \$3.50 per day for each day she is present in class.

Admission requirements are a Grade 10 diploma (Ontario) or equivalent; or Grade 8 education if the applicant is over 25 years of age. All applicants must be between the ages of 17 and 45.

No additional training is available to Registered Nursing Assistants, and courses taken in the R.N.A. program may not be used as credit toward an R.N. diploma.

B. OCCUPATIONAL STATUS

There are approximately 14,000 nursing assistants employed in Ontario. The average annual infusion is approximately 2,000 and the average annual attrition 10%.

Nursing Assistants may be employed in all types of hospitals, public health and visiting nursing agencies, nursing homes and private homes. They work under the close supervision of a Registered Nurse or a physician. In a hospital, the Nursing Assistant gives nursing care to convalescent or mildly-ill patients, and helps the nurse in the care of the acutely-ill. In homes she generally works under the direction of a physician, but some Nursing Assistants are employed by the visiting nursing agencies and give nursing care to patients under the supervision of the agency nursing staff.

The duties of the Nursing Assistant include bathing and general nursing care of patients; taking and recording temperature, pulse and respiration; preparing diets, serving meals and feeding patients; giving simple treatments, and taking care of the patients' surroundings. She may be required to provide care for healthy infants, provide aid in an emergency, or (in a home) care for a convalescent or chronically-ill patient.

The Nursing Assistant, in order to be registered in Ontario, must pass an examination set by the Ontario College of Nurses which meets the requirements of the Nurses Act (1961-62). She then qualifies to practice as a Registered Nursing Assistant in Ontario, and may join the Ontario Association of Registered Nursing Assistants, a professional organization which was formed under the sponsorship of the R.N.A.O.

HOSPITAL ORDERLY *SUMMARYA. EDUCATION AND TRAINING

1. Length of educational program)) formal programs 4 months;
informal programs no specified length

2. Length of training program)

3. Kind of program certificate awarded on completion of formal training program.

4. Number and setting of programs courses offered at Adult Education Centres in Toronto, Niagara Falls, Port Arthur, Kitchener. + informal training programs in most general hospitals in Ontario.

5. Availability of additional training none

6. Admission requirements Grade 10 education preferred, but candidates having other desired qualifications will be considered.

7. Fees none

8. Bursary assistance in adult education training centres, trainees may be eligible for Manpower allowance. In informal programs orderlies are paid regular salary during training period.

B. OCCUPATIONAL STATUS

1. Manpower data (est.) 3,500 employed in Ontario.

2. Place of employment general or chronic hospitals, nursing homes.

3. Primary function assists with nursing care of male patients.

4. Basis of employment prescription

5. Initial salary range approximately \$4,000 - \$4,500 per annum.

6, 7, 8. Certification, registration and licensing none

9. Professional organization none

* the hospital orderly has other titles depending on the employing agency. These might be "Nursing Orderly", "Nursing Assistant" or "Attendant".

DetailA. Education and Training

There are two ways in which a hospital orderly may be trained in Ontario. First, his training may be acquired in most general hospitals in Ontario where informal on-the-job training is offered by the hospital staff. This informal training is of no specified length and no certificate or diploma is awarded on its completion. The orderlies are paid a regular salary during the training period and therefore do not require financial assistance.

Secondly, the orderly may be trained in one of four formal programs offered by Ontario Adult Education Centres in Toronto, Niagara Falls, Port Arthur and Kitchener. These courses are of four month's duration, and a certificate is awarded on completion of the program. There are no fees for the course, and students may be eligible for a Manpower Allowance of approximately \$35.00 per week (or more if they have dependents) provided they have been actively employed in the working force for three years prior to entering the program.

Both the informal and formal training programs prefer to train applicants who have completed grade 10. Applicants who have other desired qualifications, however, may be considered for training.

B. Occupational Status

There are at the present time (September, 1968) approximately 3,500 hospital orderlies employed in general or chronic hospitals, and nursing homes in Ontario.

The primary function of the hospital orderly is to assist with the nursing care of the male patient and to perform specified duties related to the care of all patients under the direction of the registered nurse. These duties include making beds, care of personal hygiene of male patients, lifting and transporting patients, admitting and discharging patients, collecting various kinds of specimens, and pre-operative preparation of patients. The orderly is also responsible for administering food services, general housekeeping duties, and isolation and aseptic techniques as well as assisting with first aid in medical emergencies.

The initial salary range of the hospital orderly is approximately \$4,000 - \$4,500 annually.

There is no certification, registration or licensing of hospital orderlies; nor is there a voluntary professional organization to which they may belong.

NURSING AIDESUMMARYA. EDUCATION AND TRAINING

1. Length of educational program none N/A
2. Length of training program no specified formal training
3. Kind of program in-service training; no diploma or certificate awarded
4. Number and setting of programs most general and psychiatric hospitals and/or nursing homes
5. Availability of additional training none at this level
6. Admission requirements grade 8 (usually)
7. Fees none N/A
8. Availability and amount of bursary assistance N/A

B. OCCUPATIONAL STATUS

1. Manpower data (est.) number employed (incl. ward clerks and aides) 10,000
2. Place of employment general and psychiatric hospitals and nursing homes
3. Primary function non-medical, simple nursing duties, largely at the housekeeping level
4. Basis of employment duties carried out by prescription only
5. Initial salary range approximately \$2,800.00 - \$3,000.00 per annum
- 6, 7 & 8 Certification, registration and licensing none
9. Professional organization none

DETAILA. EDUCATION AND TRAINING

The nursing aide receives no formal education or training which prepares her for her job. She learns to perform her duties as she carries them out in the work setting, and is instructed by members of the professional hospital staff. No certificate or diploma is awarded to the nursing aide, and there is no possibility of her acquiring further training except through enrolment in a program for Registered Nursing Assistants.

B. OCCUPATIONAL STATUS

The nursing aide may be employed in a general hospital, a psychiatric hospital or a nursing home. Her functions include non-medical nursing duties such as serving meals, feeding patients, and hygienic care of the patients' surroundings (cleaning, care of flowers, etc.) These duties are performed under the supervision and instruction of professional hospital staff members. As there is no formal training for the nursing aide, she is not registered, licensed or certified and does not belong to a professional organization. The initial salary which may be expected by the nursing aide ranges from \$2,800.00 - \$3,000.00 yearly, although salary ranges are determined largely through union contracts and vary from one area to another.

APPENDIX I

NUMBER OF BASIC NURSING PROGRAMS in ONTARIO
 BY TYPE of SCHOOL and TYPE of PROGRAM (Sept. 1968)

Type of School

	University	Regional Schools	Hospital Schools			Psychiatric Hospital Schools	Ind.	Total
			To remain open	To 1969	To 1970			
4 year	7							7
3 year			2	5	4	3		20
2 + 1 year		15	28	4				47
1 year		1	4				4	9
Total	7	16	40	9	4	3	4	83

Type of Program

Programs pending

Queen's University School
 Guelph Regional School
 Vanier Regional School (Ottawa)
 Peterborough Regional School
 Algoma Regional School
 Seneca College

Note: Three year post-basic degree programs for Registered Nurses are offered by the University of Toronto and the University of Western Ontario. Two plus one year programs (or two summer courses) are offered by Lakehead University and the University of Windsor. And two-year programs are offered by Queen's University and the University of Ottawa.

COLLEGE OF NURSES OF ONTARIO

SCHOOLS OF NURSING

September 1968.

Barrie

Royal Victoria Regional School of Nursing 2 + 1
 61 Wellington Street West

Belleville

The Edith Cavell Regional School of Nursing 2 + 1
 c/o Belleville General Hospital

Belleville General Hospital School of Nursing

3 year (to close 1970)

Brantford

Brantford General Hospital School of Nursing 2 + 1

Brockville

Brockville Regional School of Nursing 2 + 1
 c/o Brockville General Hospital

Brockville Psychiatric Hospital School of Nursing 3 year

Chatham

Public General Hospital School of Nursing 2 + 1

St. Joseph's Hospital School of Nursing 2 + 1 (to close 1969)

Cornwall

Cornwall Regional School of Nursing 2 + 1
 801 Fourth Street East

Cornwall General Hospital School of Nursing 3 year (to close 1969)

St. Joseph's School of Nursing 3 year (to close 1969)
 Hotel Dieu Hospital

Fort William

McKellar General Hospital School of Nursing 3 year

Galt

South Waterloo Memorial Hospital School of Nursing 3 year

Guelph

Regional School of Nursing (pending)

Guelph General Hospital School of Nursing 2 + 1

St. Joseph's Hospital School of Nursing 2 + 1

Hamilton

Hamilton Civic Hospitals School of Nursing 2 year
237 Barton Street East

Hamilton & District School of Nursing 2 year
Box 590

St. Joseph's School of Nursing 2 + 1
301 James Street South

McMaster University School of Nursing 4 year

Kingston

Kingston General Hospital School of Nursing 2 + 1

St. Joesph's School of Nursing 2 + 1
Hotel Dieu Hospital

Kingston Psychiatric Hospital School of Nursing 3 year

Queen's University School of Nursing 4 year (pending)

Kirkland Lake

Northern Ontario Regional School of Nursing 2 + 1
P.O. Box 391

Kitchener

Kitchener-Waterloo Hospital School of Nursing 3 year

St. Mary's School of Nursing 2 + 1
949 Queen's Boulevard

London

St. Joseph's Regional School of Nursing 2 year

St. Joseph's Hospital School of Nursing 2 + 1 (to close 1969)

Victoria Hospital School of Nursing 2 + 1

University of Western Ontario School of Nursing 4 year

Niagara Falls

Greater Niagara General Hospital School of Nursing 2 + 1

North Bay

St. Joseph's School of Nursing 2 + 1

Orillia

Soldiers' Memorial Hospital School of Nursing 2 + 1

Oshawa

Oshawa General Hospital School of Nursing 2 + 1

Ottawa

Ottawa Civic Hospital School of Nursing 2 + 1 (old)

Ottawa General Hospital School of Nursing 3 year

St. Louis Marie de Montfort Hospital School of Nursing, Montreal Road 3 year

Vanier Regional School of Nursing 2 + 1 (pending)
269 Stewart Street

University of Ottawa School of Nursing 4 year

Owen Sound

Owen Sound Regional School of Nursing 2 + 1
Sixth Avenue West

General and Marine Hospital School of Nursing 2 + 1 (old) (to close 1969)

Pembroke

The Lorrain School of Nursing 2 + 1
201 Deacon Street

Peterborough

Peterborough Civic Hospital School of Nursing 2 + 1

St. Joseph's School of Nursing 2 + 1

Port Arthur

Lakehead Regional School of Nursing 2 + 1
P.O. Box 1165

St. Joseph's General Hospital School of Nursing 3 year (to close 1970)

Port Arthur

General Hospital of Port Arthur School of Nursing 3 year (to close 1970)

Lakehead University School of Nursing 4 year

St. Catharines

The Mack School of Nursing 2 + 1
Queenston Street

Mack Training School for Nurses 3 year (to close 1969)
St. Catharines General Hospital

St. Thomas

St. Thomas-Elgin General School of Nursing 2 + 1
Elm Street

Sarnia

St. Clair Regional School of Nursing 2 + 1
220 North Mitton Street

Sarnia General Hospital School of Nursing 3 year (to close 1969)

Sault Ste. Marie

Algoma Regional School of Nursing (pending)

St. Mary's School of Nursing 2 + 1
General Hospital

Plummer Memorial Public Hospital School of Nursing 3 year

Stratford

Stratford General Hospital School of Nursing 3 year

Perth-Huron Regional School of Nursing 2 + 1 (pending)
c/o Stratford General Hospital

Sudbury

Sudbury Regional School of Nursing 2 + 1
Box 1271

St. Elizabeth School of Nursing 2 + 1 (old)
St. Joseph's Hospital (to close 1969)

Marymount School of Nursing 3 year (to close 1969)
Sudbury General Hospital

Laurentian University School of Nursing 4 year

Timmins

Timmins District School of Nursing 2 + 1
c/o St. Mary's Hospital

St. Mary's Hospital School of Nursing 3 year (to close 1970)

Toronto Metro

Credit Valley Regional School of Nursing 2 + 1
2186 Hurontario Street, Mississauga

Toronto East General & Orthopaedic Hospital 2 + 1
School of Nursing, Coxwell at Sammon Ave.

Toronto General Hospital School of Nursing 2 year

Hospital for Sick Children School of Nursing 2 + 1

Nightingale School of Nursing 2 year
2 Murray Street, Toronto 2B

North York Branson Hospital School of Nursing 3 year
555 Finch Avenue West, Willowdale

Osler School of Nursing 2 + 1
82 Buttonwood Avenue, Weston

Quo Vadis School of Nursing 2 year
160 Sherway Drive, Etobicoke

Seneca Community College Nursing Course (pending)

Ryerson Polytechnical Institute 2 year
50 Gould Street, Toronto 2

St. Joseph's School of Nursing 2 year
50 Sunnyside Avenue, Toronto 3

St. Michael's School of Nursing 2 + 1
30 Bond Street, Toronto 2

Scarborough Regional School of Nursing 2 + 1
2877 Ellesmere Road, West Hill

University of Toronto School of Nursing 4 year

Wellesley Hospital School of Nursing 2 + 1 (old)
160 Wellesley Street East, Toronto 5

The Atkinson School of Nursing 2 + 1 (old)
Toronto Western Hospital
399 Bathurst Street, Toronto 2B

Women's College Hospital School of Nursing 2 year
Burton Hall, 60 Grosvenor Street, Toronto 5

York Regional School of Nursing
2747 Leslie Street (at Hwy. 401), Willowdale

2 + 1

Whitby

Whitby Psychiatric Hospital School of Nursing 3 year

Windsor

Metropolitan General Hospital School of Nursing 2 + 1 (old)

Hotel Dieu of St. Joseph Hospital School of Nursing, 1086 Ouellette Avenue 2 + 1

Grace Hospital School of Nursing 2 + 1

University of Windsor 4 year

Woodstock

Woodstock General Hospital School of Nursing 2 + 1

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APPENDIX IIFINANCIAL ASSISTANCE FOR NURSES

Name	- Ontario Department of Health Bursaries (a)
Value	<u>\$1800.</u> - \$1,600 without or \$2,000.00 with dependents + tuition
Number	- not stated
Duration	- one or two academic years
*Conditions	- available to R.N.'s holding baccalaureate degrees and working toward a Master's degree.
Name	- Ontario Department of Health Bursaries (b)
Value	- \$1,400.00 without or \$1,800.00 with dependents + tuition
Number	- not stated
Duration	- one or final two academic years
*Conditions	- available to registered nurses working toward certificate, or baccalaureate degree
Name	- Ontario Department of Health Bursaries (c)
Value	- \$1,575.00 without or \$2,025.00 with dependents + tuition
Number	- not stated
Duration	- one or final two academic years.
*Conditions	- available to registered nurses working toward baccalaureate degree (who will work in field of Public Health Nursing) or to registered nurses working toward Certificate in Public Health Nursing.
Name	- St. Elizabeth Visiting Nursing Association Bursaries
Value	- \$1,500.00
Number	- not stated
Duration	- one year
Conditions	- awarded to students entering the final year of the basic degree or post-diploma degree program in nursing, AND (other separate bursary) awarded to an R.N. taking the certificate course in public health nursing. Employment commitment required of all recipients
Where tenable	- not stated
Name	- University of Toronto, School of Nursing Alumnae Bursaries
Value	- \$400.00
Number	- not stated
Duration	- 4 years
Conditions	- awarded to nursing students who have good academic standing and who are in need of financial assistance
Where tenable	- University of Toronto, School of Nursing.

* Return of service in specified nursing area required of all government bursary recipients. All bursaries tenable at any approved schools or universities.

Name - R.N.A.O. bursary
 Value - \$475.00 annually
 Number - one annually
 Duration - 4 years
 Conditions - awarded to a student entering basic degree program
 who has good academic standing and demonstrates
 financial need
 Where tenable - any school offering basic degree program

Name - St. John Ambulance Countess Mountbattent Bursaries
 Value - \$200 - \$600
 Number - not stated
 Duration - one year
 Conditions - awarded to nursing students in basic degree and post-
 diploma degree programs who have good academic standing,
 personal ability, and demonstrate financial need.
 Where tenable - any school offering approved basic or post-basic program

Name - St. John Ambulance, Margaret McLaren Memorial Fund
 Value - \$100
 Number - not stated
 Duration - not stated
 Conditions - awarded to experienced R.N.'s pursuing a post-diploma
 degree program in nursing, who have proven their ability
 and are preparing themselves for greater responsibility and
 service.
 Where tenable - not stated

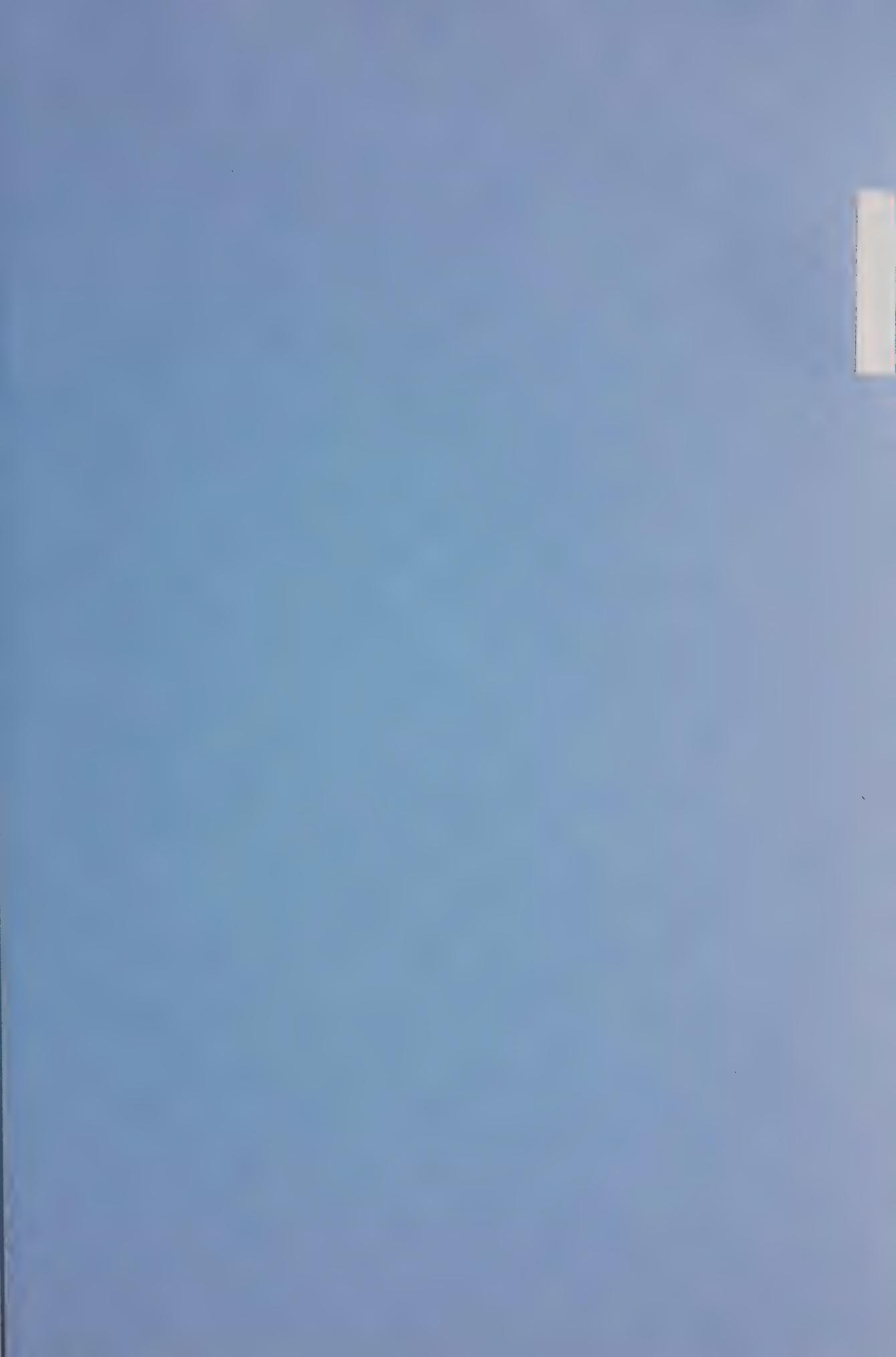
Name - Victorian Order of Nurses Bursaries
 Value - \$1,000.00 - \$1,800.00
 Number - not stated
 Duration - one year
 Conditions - awarded to students entering the final year of a
 basic degree program in nursing, a post-diploma degree
 program, or a Certificate program in Public Health
 Nursing. Special consideration given to students working
 toward Master's degree. Employment commitment required.
 Where tenable - any school offering the specified programs

Name - Ontario Mental Health Foundation Bursary
 Value - \$1,000
 Number - not stated
 Duration - one year
 Conditions - awarded to students entering the final year of the
 basic degree or post-diploma degree course in Nursing
 Where tenable - not stated

Name - I.O.D.E. (Dr. David Crombie Chapter) Bursary
Value - \$100.00
Number - one
Duration - not stated
Conditions - awarded to a student registered in the School of Nursing,
University of Western Ontario.

Name - The Mildred I. Walker Bursary
Value - \$500.00
Number - one
Duration - not stated
Conditions - awarded to a student registered in the School of Nursing,
University of Western Ontario. Preference given to students
in final year of program.

Note: Additional assistance may be available from Registered Nurses
Association of Ontario, the Chapters of the local Hospital
Auxiliaries and from University Schools of Nursing scholarships
and bursaries.



BASIC PHYSICIANSUMMARYA. EDUCATION AND TRAINING

1. Length of educational program

2 year pre-med. + 4 years
medicine

2. Length of training program

1 year's internship in approved
hospital required for licensure

3. Kind of program

degree - Doctor of Medicine

4. Number and setting of programs

5 Ontario universities with
Faculties of Medicine (McMaster,
Ottawa, Queen's, Toronto,
Western).5. Availability of additional
trainingadvanced education and training
leading to certification as
specialist available; also
refresher courses and continuing
education offered by universities
and local medical societies.

6. Admission requirements

admission to pre-med. courses
requires completion of Ontario
grade 13 with acceptable academic
standing and specified subject
requirements. Admission to
professional medical programs
requires either (a) completion
of a two-year pre-medical program
or (b) completion of 3-4 years
of degree program acceptable to
the Faculty of Medicine of the
university concerned.

7. Fees

academic fees (excluding cost
of books and instruments) range
between \$500.00 and \$730.00
per academic year.

8. Bursary assistance

see Appendix I.

B. OCCUPATIONAL STATUS

1. Manpower data (est.)

number employed - 4300
average annual infusion - 400
average annual attrition - 2.9%
private practice, hospitals,
clinics, rehabilitation centres,
industry, government.

2. Place of employment

3. Primary function	the prevention, diagnosis and treatment of diseases and disorders of the human body.
4. Basis of employment	functions independently in private practice, or within the policies of employing organization. Renders direct service to his patient.
5. Initial salary range	\$15,000.00 - \$20,000.00 per annum.
6, 7, 8. Certification, registration and licensing	licensed under Medical Act by College of Physicians and Surgeons of Ontario; and registered with the Medical Council of Canada.
9. Professional organization	Ontario Medical Association.

DETAILA. EDUCATION AND TRAINING

Following the completion of Ontario grade 13, the individual who wishes to become a licensed physician must complete a course of study of approximately seven years' duration. This consists of (a) either a two year premedical program or equivalent (consisting usually of completion of 3-4 years of a degree program acceptable to the Faculty of Medicine to which the student wishes to be admitted); (b) a four year professional program in Medicine; and (c) a one-year internship in an approved hospital. On completion of the first two requirements, the student is awarded the M.D. degree and may apply for registration with the Dominion Medical Council. Registration with the Dominion Medical Council and completion of a one-year internship qualify the physician for licensing.

There are 5 Ontario universities which have Faculties of Medicine. These are: McMaster University, University of Ottawa, Queen's University, University of Toronto, and University of Western Ontario.

Admission to the pre-medical program, which is offered at Ottawa, Toronto and Queen's Universities, requires completion of Ontario grade 13, with certain specified subject requirements and acceptable academic standing (usually at least 70 per cent overall average). Students wishing to prepare themselves for entrance into the medical program at McMaster University or the University of Western Ontario, should enter either a B.A. or B.Sc. program (preferably with concentration in Natural Science). Admission requirements for these programs are similar to requirements for entrance into a pre-medical program; a slightly lower overall average, however, may be acceptable for admission to the B.A. or B.Sc. programs.

Admission to the professional medical program requires either completion of a two year pre-medical program, or completion of one of the above degree programs, or completion of the first year of a Natural Science program plus 2 years of an Honours Science program. These admission requirements are not interchangeable among the 5 Ontario universities. Individual university calendars should be consulted for possible options in admission requirements.

Fees for the pre-medical and medical programs range from approximately \$500.00 to approximately \$730.00 per academic year. These are academic fees only and do not include special fees, instrument fees, laboratory fees, etc. Bursary assistance is available to students of Medicine. For details see Appendix I.

Advanced education and training leading to specialist certification in specific areas of medicine are available at all Ontario Universities having Faculties of Medicine except McMaster. As well as these formal educational programs, refresher courses, continuing education courses and special lecture series are offered by Ontario universities and local medical societies.

B. OCCUPATIONAL STATUS

There are estimated to be 4300 general physicians presently employed in Ontario. The average annual infusion into the profession is approximately 400 and the average annual attrition 2.9%.

Physicians may be employed in hospitals, clinics, rehabilitation centres, industry, government and/or in private practice. The primary function of the physician is to prevent, diagnose and treat diseases and other disorders of the human body. In the course of diagnosis and treatment, the physician may make a physical examination of the patient, interview him, perform special tests on him, prescribe medication special diet, etc. and/or arrange for additional or other treatment by a specialist, or hospitalization.

The physician works independently whether he is employed in private practice or functions within the policies of an employing organization. He renders a direct service to his patients and is ultimately responsible only to his patients, although he may consult with other physicians (specialists, etc.) regarding the care and treatment of his patients.

The initial salary which the general physician may expect to receive ranges between \$15,000.00 and \$20,000.00 per annum.

In order for a physician to practice legally in Ontario, it is mandatory under the Medical Act that he be licensed by the College of Physicians and Surgeons of Ontario, and registered with the Medical Council of Canada. The foreign physician applying for a licence to practise medicine in Ontario must pass the examinations set by the Medical Council of Canada. The physician graduating from a Canadian university, however, must write only one set of examinations held conjointly by the university and the Medical Council of Canada.

The provincial professional organization to which physicians may belong is the Ontario Medical Association.

APPENDIX IBURSARY ASSISTANCE AVAILABLE TO STUDENTS OF MEDICINE

Name - Ontario Department of Health Bursaries
 Value - \$1,500 without or \$2,000 with dependents *4300.00*
 Number - N.S. *3*
 Duration - Maximum ~~4~~ years
 Conditions - available to students who have completed their second year in Medicine. Each recipient has an obligation to practise general Medicine in a location acceptable to the Minister of Health, one year for each year of bursary assistance given.

Name - I.O.D.E. (Paul Peel Chapter) Bursary
 Value - \$100.00
 Number - one
 Duration - N.S.
 Conditions - awarded to student in third year medicine who has a B average and demonstrates financial need.

Name - I.O.D.E. (Lord Roberts Chapter) Bursary
 Value - \$100.00
 Number - one
 Duration - N.S.
 Conditions - awarded to student in third year Medicine who has a B average and demonstrates financial need.

Name - I.O.D.E. (7th Regiment and London Garrison Chapter) Bursary
 Value - \$100.00
 Number - one
 Duration - N.S.
 Conditions - awarded to a student in the final year of Medicine who has a B average and demonstrates financial need.

Name - The Bill McKibbon Bursary
 Value - \$500.00 per year
 Number - one
 Duration - 6 years (pre-Medicine and Medicine)
 Conditions - awarded to a male student, preferably from southwestern Ontario, selected by the secretary of the Loans and Bursaries Committee and the donor. Academic standing and personality count equally in the selection.

Name - the Meds '50 Bursary Fund
 Value - up to \$300.00 each
 Number - N.S.
 Duration - N.S.
 Conditions - awarded to students in any year who have acceptable academic standing and demonstrate financial need.

Name	- the Maude Gordon Educational Fund
Value	- up to \$500.00 each
Number	- N.S.
Duration	- N.S.
Conditions	- awarded to students from the counties of Elgin, Essex, Kent, Lambton, Middlesex, Huron, Oxford and Perth. (B average + demonstration of financial need required).
Name	- The Greek Ladies' Philoptochus Society Award
Value	- \$100.00
Number	- one
Duration	- one year
Conditions	- awarded to a student of Greek descent who demonstrates financial need and has a B average.
Name	- Dr. Arthur F. Haasz Medical Student-Aid Bursaries
Value	- up to \$250.00 each
Number	- N.S.
Duration	- N.S.
Conditions	- awarded to students in any year who have a B average and demonstrate financial need.
Name	- The Kathleen Gordon Hanna Educational Fund
Value	- up to \$500.00 each
Number	- N.S.
Duration	- N.S.
Conditions	- awarded to students from the counties of Elgin, Essex, Kent, Lambton, Middlesex, Huron, Oxford and Perth. Students must have a B average and demonstrate financial need.
Name	- Huron County Bursaries
Value	- up to \$250.00 each
Number	- N.S.
Duration	- N.S.
Conditions	- awarded to students who have lived in Huron County for at least three years. Students must have a B average and demonstrate financial need.
Name	- I.O.D.E. (Bishop Hellmuth Chapter) Bursary
Value	- \$100.00
Number	- one
Duration	- N.S.
Conditions	- awarded to a student in any year who has a B average and demonstrates financial need.

Name - American Medical Association Education and Research Foundation
 Value - up to \$200.00
 Number - one
 Duration - one year
 Conditions - available to students in any year who have obtained a B average, and demonstrate financial need.

Name - Dr. James L. Anderson Memorial Bursaries
 Value - up to \$250.00 each
 Number - N.S.
 Duration - one year
 Conditions - available to students in any year. Awarded on the basis of satisfactory academic performance and financial need.

Name - Bradshaw-Errington Fund
 Value - up to \$250.00 each
 Number - N.S.
 Duration - N.S.
 Conditions - available to students in any year who reside 25 miles or more beyond corporation limits of the city of London. Satisfactory academic performance and financial need must be demonstrated.

Name - The Dr. Frank M. Cole and Dr. John M. Cole Memorial Awards.
 Value - \$200.00 each
 Number - N.S.
 Duration - one year
 Conditions - available to students having satisfactory academic performance and demonstrating financial need. Awarded to students entering the third year of Medicine.

Name - Co-operative Medical Association of Ontario Bursary
 Value - \$500.00 per year
 Number - one
 Duration - up to 4 years
 Conditions - Awarded to a student in any year who is member, or the son or daughter of a member, of one of the Medical Co-operatives of the Co-operative Medical Services Federation of Ontario. Student must have B average and demonstrate financial need.

Name - Defries Medical Student-Aid Bursaries
 Value - up to \$250.00 each
 Number - N.S.
 Duration - N.S.
 Conditions - awarded to students in any year who have a B average and demonstrate financial need.

Name - The M.C. Mowry Memorial Bursary
 Value - \$75.00
 Number - one
 Duration - N.S.
 Conditions - available to students in fourth year Medicine who demonstrate financial need and have B average

Name - Ontario Medical Association Bursary and Loan Fund
 Value - up to \$350.00 each
 Number - N.S.
 Duration - N.S. (not more than 2 years)
 Conditions - awarded to students in first and second years of Medicine who have acceptable academic standing and demonstrate financial need.

Name - Oxford County Bursaries
 Value - up to \$250.00 each
 Number - N.S.
 Duration - N.S.
 Conditions - awarded to students from Oxford County excluding Ingersoll and Woodstock who demonstrate financial need and who have acceptable academic standing.

Name - Perth County Bursaries
 Value - up to \$250.00 each
 Number - N.S.
 Duration - N.S.
 Conditions - awarded to students from Perth County excluding St. Mary's and Stratford, who have acceptable academic standing and demonstrate financial need.

Name - Maud H. Smallman Awards
 Value - \$500.00 each
 Number - two
 Duration - N.S.
 Conditions - awarded to students in any year who have B average and demonstrate financial need.

Name - The Atkinson Foundation Bursaries in Medicine
 Value - fund of \$1000.00
 Number - N.S.
 Duration - N.S.
 Conditions - awarded to students in the second, third or fourth medical years during the second term. Awards made on the basis of scholarship and need. Recipients must be Ontario residents.

Name - Co-operative Medical Services Federation of Ontario Bursary
Value - \$2,000.00
Number - one
Duration - \$500.00 per year for 4 years.
Conditions - awarded to student who has completed pre-medical years and is entering his first medical year in an Ontario University. (If no such student qualifies, a second third or fourth year student **may be chosen**. Awarded to student who has been a member, or whose parents have been members, of a Medical Co-operative for at least 2 years. Academic record and financial need will be taken into consideration.

CLINICAL PSYCHOLOGISTSUMMARYA. EDUCATION AND TRAINING

1. Length of educational program 4-5 years after general B.A.
2. Length of training program 1 year internship (post-doctoral)
3. Kind of program Degree (Ph.D.)
4. Number and setting of programs Ph.D. programs in Psychology offered by 9 Ontario Universities.
5. Availability of additional training no additional specialized training available in Ontario.
6. Admission requirements general B.A. with background in psychology and acceptable academic standing.
7. Fees approximately \$400-\$550 per academic year.
8. Bursary assistance bursary assistance available for 1-6 years in amounts ranging from \$500.00 - \$4000.00. See detail.

B. OCCUPATIONAL STATUS

1. Manpower data number employed - 240
2. Place of employment hospitals, schools, clinics, rehabilitation centres, correctional agencies, private practice.
3. Primary function uses interviews and psychological tests to assist him in the diagnosis of behavior disorders and to evaluate abilities, attitudes and personality structure. Often works closely with psychiatrist and may treat patients, helping them to achieve better mental health.

4. Basis of employment	referral or direct assistance in association with physician.
5. Initial salary range	\$9000 - \$12,000 per annum
6. Education, registration and licensure	registration mandatory by Ontario Board of Examiners in Psychology under Psychologists Registration Act, 1965. No licensing at present.
9. Professional organization	Canadian Psychological Association (Ontario Branch)

DETAILA. EDUCATION AND TRAINING

The length of the educational program required for clinical (and all other registered) psychologists is of four to five years duration following completion of a general B.A. degree or seven to eight years after Ontario Grade 13. After the student is awarded a Ph.D. degree (at the end of this program of study), he is required to serve a one-year internship in his field of specialization before he may be registered.

Ph.D. programs in psychology are offered at 9 Ontario universities. Admission requirements vary somewhat; however, Ontario universities generally require that the applicant have a general B.A. degree with an undergraduate background in psychology, and acceptable academic standing. Fees vary from approximately \$400 to approximately \$550.00 per academic year.

Ontario Department of Health bursary assistance is available to graduate students in Psychology for periods of one and two academic years. These bursaries are valued at \$1600.00 per year for students without dependents, and \$2000.00 per year for students with dependents plus tuition. A return of service is required. Other bursaries and grants available to the graduate Psychology student include the Imperial Oil Graduate Research Fellowship available for three years and valued at \$1600 per annum (one only); The Boys' Clubs of Canada Scholarships valued at \$500-\$1000.00 annually for one to six years. (25 awards; tenable at York University only). A guaranteee of two years' service in a member club of the Boys Clubs of Canada is required. Also, available are five B.A. Oil Co., Ltd., Graduate Fellowships valued at \$4000.00, and the Canadian Federation of University Women Junior Fellowship (\$2000.00; only one).

B. OCCUPATIONAL STATUS

There are estimated to be 240 clinical psychologists employed in Ontario at present (September 1968). The clinical psychologist may be employed in hospitals, schools, clinics, rehabilitation centres, correctional agencies, or in private practice. He makes use of interviews and psychological tests to assist him in the diagnosis of behavior disorders; and to evaluate abilities, attitudes, and personality structure. He may also be responsible for conducting psychotherapy with patients either in conjunction with a psychiatrist or by referral from a medical practitioner.

The annual salary which the clinical psychologist may expect initially varies from \$9000.00 to \$12,000.00 per annum depending upon the nature of his work and the kind of institution in which he is employed if he is not engaged in private practice.

Registration of psychologists in Ontario is mandatory under the Psychologists Registration Act, 1965 and is the jurisdiction of the Ontario Board of Examiners in Psychology. To be registered in Ontario, the psychologist must have a doctoral degree based on a program of studies whose content was primarily psychological, from an educational institution approved by the Board.

He must also have at least one year of experience acceptable to the Board; and have passed the examinations required by the Board.*

The voluntary professional organization to which registered psychologists may belong is the Canadian Psychological Association (Ontario Branch).

* Before June 11, 1960, a psychologist could be registered if he had (a) received an M.A. degree in psychology from an approved institution and (b) had 4 years of experience acceptable to the Board.

MEDICAL SOCIAL WORKERSUMMARYA. EDUCATION AND TRAINING

1. & 2. Length of educational and training program

M.S.W. - 2 years following completion of B.A. degree
 OR B.S.W. - 4 years following completion of Ontario grade 13.

3. Kind of program

degree - B.S.W. or M.S.W.

4. Number and setting of programs

B.S.W. - University of Windsor, Laurentian University
 M.S.W. - Carleton University, University of Toronto
 University of Waterloo

5. Availability of additional training

University of Toronto offers Diploma in Advanced Social Work and D.S.W. degree

6. Admission requirements

B.S.W. - Ontario grade 13 (language or Mathematics A + at least 5 other credits)
 M.S.W. - B.A. degree from recognized university, acceptable academic standing, good physical health and personal suitability

7. Fees

approximately \$500.00 - \$600.00 per academic year.

8. Bursary assistance

see Appendix I.

B. OCCUPATIONAL STATUS

1. Manpower data (est.)

number employed in hospital settings - 100

2. Place of employment

hospitals, clinics, rehabilitation centres, home care programs.

3. Primary function

works with patients and their families to try to deal with the social, emotional and economic difficulties arising in connection with the patients' illnesses.

4. Basis of employment	renders direct service to patients and their families on referral from physician or therapist (occupational, physical, psychological, etc.) Functions within policies of employing organization.
5. Initial salary range	\$6,500.00 - \$8,500.00 per annum.
6, 7, 8. Certification, registration and licensing	None at present. Legislation for registration of social workers now in the process of being enacted.
9. Professional organization	Canadian Association of Professional Social Workers (Ontario Branch)

DETAILA. EDUCATION AND TRAINING

The medical social worker is classified according to his function and the setting in which he works. His education and training does not differ from that of other social workers.

This education consists of either a two-year post-B.A. (M.S.W.) program, or a four-year post-secondary school (B.S.W.) program. The M.S.W. program may be taken at Carleton University, the University of Toronto and the University of Waterloo; the B.S.W. program is available at the University of Windsor and Laurentian University. Both types of programs include both instruction in the theoretical aspects of social work and supervised practical training.

Training beyond the M.S.W. degree is available at the University of Toronto, where a Diploma in Advanced Social Work and a D.S.W. are offered.

Admission to the B.S.W. program requires that the applicant have completed 6-7 grade 13 Credits (4 subjects) with an overall average of not less than 60%. Admission to the M.S.W. program requires a B.A. degree from a recognized university, preferably with a background in the social sciences, and acceptable academic standing. All applicants must be in good physical health and indicate personal suitability for the profession.

Fees for these programs range from approximately \$500.00 to approximately \$600.00 per academic year. Bursary assistance is available to M.S.W. students in amounts ranging from \$100.00 - \$4,000.00. For details see Appendix I.

B. OCCUPATIONAL STATUS

There are at present (September 1968) an estimated 100 medical social workers employed in Ontario.* The medical social worker usually works in a medical setting such as a hospital, clinic or rehabilitation centre; he may also be employed in home care programs. Working directly with the patient and his family, the social worker attempts to treat the social aspects and consequences of illness, thereby increasing the effectiveness of the patient's medical care. To achieve these aims, he may provide assistance in overcoming problems which prevent patients from benefiting fully from the medical care available; he may help patients to remedy conditions contributing to illness (such as housing, family attitudes and working conditions); serve as a consultant to the administrators of hospitals or clinics in the formulation of policies affecting the social welfare of the patient; and assist patients in readjusting themselves after medical treatment or because of permanent disability.

The initial salary range of the medical social worker is approximately \$6,500.00 - \$8,500.00 per annum.

* This number includes only medical social workers employed in hospital settings. No information is available re number employed in other settings.

The medical social worker renders a direct service to patients and their families who have been referred to him by a physician, occupational therapist, psychologist etc.; he functions within the policies of the employing organization.

At the present time there is no certification, registration or licensing of social workers in Ontario. Legislation providing for the registration of social workers, however, is now in the process of being enacted.

Medical social workers may belong to the Canadian Association of Professional Social Workers (Ontario Branch).

BURSARY ASSISTANCE AVAILABLE TO STUDENTS OF SOCIAL
WORK IN ONTARIO

Name - Ontario Department of Health Bursaries
 Value - \$1,800 ~~without~~ or \$2,250 ~~with dependents~~ + tuition
 Duration - 1 or 2 academic years
 Conditions - available to students with B.A. pursuing graduate studies in social work. (return of service in specified areas required)

Name - Lutheran Church of America Scholarships
 Value - usually covers tuition costs only
 Numbers - variable
 Duration - 1 or 2 academic years
 Conditions - members of Lutheran Church meeting requirements for entrance into professional school of social work. Commitment to work in Lutheran welfare agency for stated time period.

Where Tenable - any accredited graduate professional school of social work

Name - Lutheran Social Work Scholarships, Incorporated
 Value - tuition plus living stipend of approximately \$150.00 per month
 Number - 30 each year
 Duration - one year; renewable
 Conditions - applicants must be interested in entering a career in Lutheran Welfare

Where Tenable - any approved graduate school of social work

Name - The Catholic Women's League of Canada National Scholarship
 Value - \$1,500
 Number - 2
 Duration - 2 academic years
 Conditions - awarded to a Catholic Canadian proceeding toward M.S.W. who agree to devote 2 years to social work in Canada.

Where Tenable - St. Patrick's College, Ottawa; Maritime School of Social Work, Halifax.

Name - I.O.D.E. (Ontario Chapter) Fellowships in Library Science and Social Work
 Value - \$500.00
 Number - one in Social Work
 Duration - one year; renewable
 Conditions - awarded to a Canadian graduate of an Ontario university entering a recognized School of Social Work in Ontario.

Where Tenable - any recognized School of Social Work in Ontario.

Name - Government of N.W.T. Bursaries
 Value - Single - \$3,000 per annum; married \$3,500 per annum
 Number - 3 per year
 Duration - one year; renewable
 Conditions - recipient must accept employment in N.W.T. for length of time equal to duration of support OR reimburse government of N.W.T. for full amount of support within 120 days of refusal.
 Where Tenable - any recognized School of Social Work in Canada.

Name - St. Patrick's College - School of Social Welfare - Father Molloy Scholarship
 Value - \$600
 Number - 1
 Duration - one academic year
 Conditions - awarded to a first year student at St. Patrick's College on basis of scholastic achievement, professional promise and financial need.

Name - St. Patrick's College - School of Social Welfare - Ottawa Community Chest Bursary
 Value - \$500
 Number - 3 (not offered every year)
 Duration - one academic year
 Conditions - B.A.; personal suitability for social work; financial need; some preference given to residents of Ottawa area.
 Where Tenable - School of Social Welfare, St. Patrick's College

Name - University of Toronto: School of Social Work - Samuel Cohen Memorial Bursary
 Value - \$250
 Number - one
 Duration - one academic year
 Conditions - open on basis of need to a second year student concentrating in family welfare who intends to work in this field upon graduation
 Where Tenable - University of Toronto

Name - University of Toronto, School of Social Work - The Council of Friendship Fund
 Value - dependent upon value of the income from the fund
 Number - one or more annually
 Duration - one year
 Conditions - interest in specializing in work related to newcomers to Canada and their problems as New Canadians
 Where Tenable - University of Toronto

Name - University of Toronto - School of Social Work -
 Delphian Service Group Bursary
 Value - \$100
 Number - one
 Duration - one year
 Conditions - awarded annually to a student on basis of financial need
 and professional promise; preferably to a student interested
 in work with the aged
 Where Tenable - University of Toronto

Name - University of Toronto - School of Social Work -
 East Toronto Occupational Centre Bursary
 Value - \$200
 Number - one
 Duration - one year
 Conditions - awarded on the basis of merit and financial need to a full-
 time student who intends to pursue a career in social group
 work.
 Where Tenable - University of Toronto

Name - University of Toronto, School of Social Work -
 Mae Fleming Memorial Bursary
 Value - \$225
 Number - one
 Duration - one academic year
 Conditions - awarded to a student whose particular interest is in
 field of child welfare. Not restricted to degree
 candidates; open to students in both years. Preference
 to second year students
 Where Tenable - University of Toronto

Name - University of Toronto, School of Social Work - General
 Bursaries
 Value - up to \$400
 Number - one or more annually
 Conditions - granted to students who cannot continue their formal
 education without financial assistance. Awards not
 to exceed \$250 for a Toronto resident or \$500 for a
 non-resident.

Name - University of Toronto, School of Social Work - Samuel
 Godfrey Y.M. and Y.W.H.A. Memorial Bursary
 Value - not specified
 Number - one per year
 Duration - one academic year
 Conditions - open to graduates of Canadian universities who will
 specialize in group work
 Where Tenable - University of Toronto

Name - University of Toronto, School of Social Work and School of Graduate Studies - Stuart K. Jaffray Bursary.
 Value - \$200
 Number - one
 Duration - one year
 Conditions - awarded to a student in the first or second year who shows an interest in but not necessarily a vocational commitment to the field of corrections
 Where Tenable - University of Toronto

Name - University of Toronto, School of Social Work - Caroline Macdonald Bursary
 Value - income from fund
 Number - one
 Duration - one academic year
 Conditions - available to a second year student (preferably Oriental) on the basis of academic standing and financial need.
 Where Tenable - University of Toronto

Name - University of Toronto, School of Social Work - Agnes McPhail Memorial Bursary
 Value - \$200
 Number - one
 Duration - one academic year
 Conditions - open to women students. Consideration given to personal character, suitability for work in the field of corrections and penology and financial need.
 Where Tenable - University of Toronto

Name - University of Toronto, School of Social Work - National Council of Jewish Women Scholarship
 Value - \$300
 Number - one
 Duration - one year
 Conditions - awarded to a women student on basis of financial need
 Where Tenable - University of Toronto

Name - University of Toronto, School of Social Work - Ontario Council of Christian Education Award
 Value - \$200
 Number - one
 Duration - one academic year
 Conditions - open to a student whose thesis embodies a research project dealing with social problems incidental to the consumption of alcoholic beverages
 Where Tenable - University of Toronto

Name - University of Toronto, School of Social Work -
 Benjamin Sadowski Bursaries
 Value - up to \$750
 Number - one or more annually
 Conditions - awarded on the basis of merit and financial need.
 Preference given to Ontario resident who is son or
 daughter of a minister or rabbi, a professor or
 instructor of University of Toronto, or a principal
 or teacher in Ontario.
 Where Tenable - University of Toronto

Name - University of Toronto, School of Social Work -
 University of Toronto Special Open Fellowship
 Value - \$400
 Number - one or more annually
 Duration - one year
 Conditions - These fellowships may be held in any graduate field; some
 are open and some established in certain departments or
 fields of study.
 Where Tenable - University of Toronto.

Name - University of Toronto, School of Social Work -
 Julia Stewart Bursary
 Value - variable
 Number - one or more awarded annually
 Conditions - awarded to student demonstrating financial need;
 preference given to students in the field of Family
 Case Work
 Where Tenable - University of Toronto

Name - University of Toronto, School of Social Work -
 United Community Fund of Greater Toronto Bursaries
 Value - up to \$750.00
 Number - several
 Duration - one academic year
 Conditions - awards vary based on academic promise and financial
 need
 Where Tenable - University of Toronto

Name - Y.W.C.A. of Canada Awards
 Field of Study - Social work, Health and Physical Education, Christian
 Education
 Value - up to \$800
 Number - 2
 Duration - one year
 Conditions - available to prospective staff of the Y.W.C.A. in Canada.
 Persons making application from abroad must be recommended
 by their National Y.W.C.A.
 Where Tenable - Any Canadian University offering the training designed.



PHYSIATRISTSUMMARYA. EDUCATION AND TRAINING

1. Length of educational program)
2. Length of training program)

4 years following completion of
M.D. degree and internship.

3. Kind of program
4. Number and setting of programs

certificate of specialization
or qualification for Fellowship
in Royal College of Physicians and
Surgeons of Canada.

5. Availability of additional
training

Faculties of Medicine at University
of Toronto, University of Western
Ontario and Queen's University.
Clinical training in affiliated
hospitals.

6. Admission requirements

refresher courses, continuing
education and special lectureships
offered by universities and local
medical societies.

7. Fees

possession of M.D. degree with
acceptable academic standing.

8. Bursary assistance

approximately \$95.00 per year.

see Appendix I (Phys.Med.)
Residents paid salary of
\$4,300.00 - \$6,700.00 per annum
depending on seniority.

B. OCCUPATIONAL STATUS

1. Manpower data (est.)

number employed - 20

2. Place of employment

private practice, hospitals,
rehabilitation centres, clinics.

3. Primary function

diagnosis, treatment and
prevention of illness, disease
or injury, using physical agents
such as massage, exercise, heat
and water.

4. Basis of employment

Direct service to patients.
Functions independently, and
(except in private practice)
within policies of the employing
organization.

5. Initial salary range

approximately \$20,000.00 per annum.

6, 7, 8. Certification, registration and licensing

registered with the Medical Council of Canada and licensed as a physician under the Medical Act by the College of Physicians and Surgeons of Ontario.

Certificate of Specialization issued by College of Physicians and Surgeons after physician passes qualifying examinations. Certification, registration and licensing all mandatory.

9. Professional organization

Ontario Medical Association,
Section of Physical Medicine.

DETAILA. EDUCATION AND TRAINING

After completing a 6-7 year educational program leading to an M.D. degree, and a one year internship, the physician who wishes to become certified as a specialist in Physical Medicine must complete a further 4 year educational-training program. Post-graduate programs in Physical Medicine are offered at the University of Toronto, the University of Western Ontario and Queen's University.

Admission to a post-graduate training program in Physical Medicine requires that the candidate possess an M.D. degree and have academic standing acceptable to the Faculty of Medicine of the university to which the applicant wishes to be admitted. As admissions are very limited, a high standard of academic excellence may be required.

Fees for these programs are approximately \$95.00 per year. Financial assistance is available to students of Physical Medicine. For details see Appendix I (Phys. Med.). As well as the bursary assistance available, resident physicians are paid an annual salary ranging from \$4,300.00 - \$6,700.00 depending upon the seniority of the resident.

Additional training is available in the field of Physical Medicine. Refresher courses, continuing education courses and special lectureships are offered on a regular basis by Ontario universities and local medical societies.

B. OCCUPATIONAL STATUS

There are approximately 20 physiatrists presently employed in Ontario. They are employed in private practice, hospitals, rehabilitation centres and clinics. The primary function of the physiatrist is the diagnosis, treatment and prevention of illness, disease or injury, using physical agents such as massage, exercise, heat and water. The physiatrist may work in co-operation with a physical therapist, orthopaedic surgeon and/or orthotist in providing care and prescribing treatment for his patients.

The physiatrist renders a service directly to his patients and functions independently. Except when he is in private practice, he functions within the policies of the organization in which he is employed. The initial salary which the physiatrist may expect to receive ranges in the area of \$20,000.00 per annum.

Certification, registration and licensing of the physiatrist are all mandatory. He must first be registered with the Medical Council of Canada and licensed as a physician under the terms of the Medical Act by the College of Physicians and Surgeons of Ontario. A Certificate of Specialization or Fellowship is granted by the College of Physicians and Surgeons after the physician has completed an approved post-graduate educational-training program and passed a qualifying examination.

The voluntary professional organization to which the physiatrist may belong is the Ontario Medical Association, Section of Physical Medicine.

APPENDIX IBursary Assistance Available
to Students of Physical Medicine

Name	- Ontario Department of Health Bursaries
Value	- \$3000 without and \$3600 with dependents and tuition
Number	- limited
Duration	- 1 or 2 academic years
Conditions	- trainee must return to or accept a full-time position in Health or Hospital Services in Ontario.
Name	- Province of Nova Scotia Postgraduate Bursaries
Value	- \$250.00 per month, \$300.00 for candidates with dependents; tuition and \$50.00 book allowance.
Number	- limited
Duration	- one year, renewable for second, occasionally for third.
Conditions	- trainee must return to or accept a full-time salaried position in Health or Hospital Services of Nova Scotia.
Where Tenable	- Nova Scotia; under special circumstances, elsewhere in Canada or in U.S.A.
Name	- United Cerebral Palsy Clinical Fellowship Program
Value	- flexible, ranging from \$2400.00 - \$4800.00
Number	- to be decided by Board of Directors
Duration	- one year with possible renewal
Conditions	- applicants judged on basis of intention of placing emphasis on problem of cerebral palsy and other neurological disabilities. Individuals nominated should be graduates of an American or Canadian class A medical school; and not over 35 years of age
Where tenable	- at hospitals approved by Council on medical Education and Hospitals (of the A.M.A.)

Note: Other bursary assistance is available in the field of medicine with no specialty area specified. These above bursaries are available only to physicians studying in the area of Physical Medicine.

PHYSIOTHERAPIST

SUMMARY

A. EDUCATION AND TRAINING

1. Length of educational program 3 years

2. Length of training program 24 weeks internship required for licensing

3. Kind of program Diploma in Physical and/or Occupational Therapy, OR degree B.Sc.M.R. (P.T.) (Western)

4. Number and setting of programs Three in Ontario: Queen's University, University of Toronto, University of Western Ontario.

5. Availability of additional training University of Toronto, Teacher of Physiotherapy certificate course (2 years); Queen's University (1 yr.) degree B.Sc.P.T.

6. Admission requirements University of Toronto and Queen's grade 13, 4 subjects comprising 7 credits; 60% average. University of Western Ontario - first year of U.W.O. science program or equivalent.

7. Fees Approximately \$550.00 - \$675.00 per year for 3 years

8. Availability and amount of bursary assistance See appendix I. (Rehab.Med.)

B. OCCUPATIONAL STATUS

1. Manpower data (est.) number employed - 1150
annual infusion - 150
annual attrition - 10%

2. Place of employment hospitals, out-patient clinics, private offices, health centres.

3. Primary function restoration of function by electrotherapy, massage, hydrotherapy and remedial exercises.

4. Basis of employment in private practice or functions within policies of employing organization.

5. Initial salary range \$6,000 recommended minimum

6, 7, 8. Certification, registration
and licensing

Provincial licence mandatory.
Licensed under the Drugless
Practitioners Act by Board
of Directors of Physiotherapy.

9. Professional organization

Canadian Physiotherapy Association.

DETAILA. EDUCATION AND TRAINING

The physiotherapist is required to complete a three-year university program in Physical Therapy (Queen's University) or in Physical and Occupational Therapy, leading to a Diploma in Physical Therapy (Queen's) OR a Diploma in Physical and Occupational Therapy (Toronto), OR a Degree in Physical and Occupational Therapy (Toronto), OR a Degree in Medical Rehabilitation, B.Sc.M.R. (P.T.) (Western). After completing this program, the physiotherapist must serve an internship of 24 weeks duration in order to be registered and licensed. This internship may be started during the summer between the second and third years of the diploma or degree course.

There are three universities in Ontario which offer this course of instruction: the University of Toronto, Queen's University, and the University of Western Ontario. An additional 2 year course is also available at the University of Toronto which leads to a Teacher of Physiotherapy Certificate. The Certificate course is open to physiotherapists who have graduated from the diploma course and have, in addition to this, three years of practice in physiotherapy. Queen's offers a one-year program leading to a B.Sc. degree in Physical Therapy. This program is open to graduates of the Diploma course.

Admission to the Diploma course at the University of Toronto and Queen's requires Ontario grade 13 (4 subjects comprising at least 7 credits) or equivalent; a 60% average; and (except in unusual circumstances) an age of less than 30 years. Admission to the course at the University of Western Ontario requires completion of the first year of a science degree program at that University, or equivalent. Fees for these programs range from approximately \$550.00-\$676.00 per academic year. For information regarding financial assistance to students of physical therapy, see Appendix I. (Rehab.Ther.)

B. OCCUPATIONAL STATUS

There are estimated to be 1150 physiotherapists practising in Ontario as of December 1968.

Annual infusion into the profession is estimated at 150, and annual attrition is estimated to be 10%.

A majority of physiotherapists is employed in hospitals where special departments under the direction of a physician are equipped to provide a variety of treatments. Outpatient clinics and health centres such as those administered by the Department of Veterans Affairs, the Armed Services, the Canadian Arthritis and Rheumatism Society, and the Crippled Children's Foundations employ physiotherapists. Many therapists have full or part-time private practices and/or work in the offices of medical doctors, treating the patients of these private practitioners.

The primary function of the physiotherapist is to restore function to injured or disabled muscles, nerves and limbs as for example in infantile paralysis, nerve injuries, fractures, and muscle disabilities of various kinds. This restoration of function is accomplished by means of electrotherapy (heat, muscle stimulation and ultra-violet radiation), massage to prepare the way for movement, hydrotherapy, and remedial exercise. Treatment is given to a patient by a physiotherapist either by direction from a physician (in a hospital or

clinic) or, of the therapist is in private practice, on referral by a physician. For the services he provides, the inexperienced physiotherapist may expect to receive a starting salary of approximately \$6,000.00 per year (by recommendation of the Canadian Physiotherapy Association).

Provincial law requires that the practising physiotherapist be licensed by the Board of Directors in Physiotherapy, under the Drugless Practitioners Act. In order to be licensed, the therapist must have completed a diploma course at an approved university, as well as a mandatory apprenticeship of 32 weeks. After being licensed, the physiotherapist may become a member of the Canadian Physiotherapy Association, a national organization which maintains and raises the standards of the profession in Canada.

OCCUPATIONAL THERAPISTSUMMARYA. EDUCATION AND TRAINING

1. Length of educational program 3 years

2. Length of training program 32 weeks internship optional but almost always served.

3. Kind of program Diploma in Occupational Therapy or Diploma in Physical and Occupational Therapy (U. of T.)

4. Number and setting of programs two in Ontario: University of Toronto, Queen's University

5. Availability of additional training U. of T.: 2 year advanced certificate course in teaching of occupational therapy; Queen's 1 year post-diploma B.Sc.(O.T.)

6. Admission requirements Ontario grade 13; (or equivalent) 4 subjects comprising 7 credits overall average of 60%; age of under 30 years.

7. Fees \$525.00 - \$549.00 per academic year

8. Bursary assistance see appendix I. (Rehab.Med.)

B. OCCUPATIONAL STATUS1. Manpower data (est.)2. Place of employment

number employed - 750

hospitals, clinics, rehabilitation centres, sanatoria, nursing homes, schools for the handicapped, home-care programs, pre-vocational assessment centres.

3. Primary function

achievement of physical, psychological and social restoration and adjustment by physical, psychological and educational activities.

4. Basis of employment

direct assistance (in hospital, etc.) or by medical referral (in private practice).

5. Initial salary range \$6000.00 - \$8100.00

6, 7, 8. Certification, registration and licensing no licensing or registration in Ontario, but Registry of qualified occupational therapists maintained.

9. Professional organization Canadian Association of Occupational Therapists and Ontario Association of Occupational Therapists.

DETAILA. EDUCATION AND TRAINING

The Occupational Therapist, like the Physical Therapist, is required to complete a three-year diploma course at one of two Ontario universities (University of Toronto or Queen's University) offering courses in Occupational Therapy, or Physical and Occupational Therapy (University of Toronto). A thirty-two week internship is optional but almost always served. This internship may be begun during the summer between the second and third years of the course.

To be admitted to these programs, the student must have an overall average of 60% in 4 grade 13 subjects comprising at least 7 credits, and be not over 30 years of age. Fees for the programs range from \$525.00 to \$550.00 per academic year.

For information regarding financial assistance available to students of occupational therapy, see appendix I.

The University of Toronto and Queen's University offer advanced courses in occupational therapy. A two-year program offered at the University of Toronto leads to a "Teacher of Occupational Therapy" Certificate, which allows the holder to be employed in the supervision and teaching of occupational therapists. Admission requires a minimum of three years' professional experience. A one year course is offered at Queen's University which leads to a B.Sc. (O.T.) degree. Admission requires at least two years' clinical experience.

B. OCCUPATIONAL STATUS

There are estimated to be 750 practising occupational therapists in Ontario as of September 1968. They may be employed in general, psychiatric, convalescent and children's hospitals; hospitals for the chronically ill; rehabilitation centres; clinics; nursing homes; prevocational assessment centres and sheltered workshops; schools for the handicapped; and in home care and community rehabilitation programs.

The primary function of the occupational therapist is the achievement of physical, psychological and social restoration and adjustment by means of physical, psychological and educational activities, and assessment of physical and/or psychological disability. The means of achieving these adjustments include practice in activities of daily living and self-help devices, therapeutic activities, industrial and pre-vocational skills, recreational activities, remedial games, cultural and educational interest activities, and play therapy activities for children. Treatment is given by the occupational therapist on direction from a physician. (referral)

The Canadian Association for Occupational Therapists recommends that the initial salary range for the qualified staff therapist be not less than \$6,000.00 per annum. Staff therapists with more experience may receive up to \$8,100.00 per year; and the salary of a senior supervising therapist ranges between \$10,200.00 and \$12,700.00.

Occupational Therapists are not at the present time registered or licensed in Ontario. The possibility of passing legislation which would provide for their registration, however, is now being investigated by the Canadian Association of Occupational Therapists and the Ontario Association of Occupational Therapists, the voluntary organizations of the profession. The C.A.O.T. at present keeps a registry of individuals who are qualified to practise occupational therapy.

APPENDIX I (Rehab. Med.)Bursary Assistance Available to Students of
Physical and Occupational Therapy

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nditions

- Ontario Department of Health Bursaries
- \$1400.00 - \$2000.00 + tuition depending upon qualifications and marital status.*
- not stated
- 1 and 2 academic years
- available to students of physical and/or occupational therapy. Return of service required.

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- O.H.S.C. Internships
- \$125.00 per month
- unlimited
- length of internship
- O.H.S.C. will accept payments by hospitals up to \$125.00 per month to each student who is engaged in serving an approved internship

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- Canadian Arthritis and Rheumatism Society Fellowship (for post-graduate course in teaching of physical or occupational therapy).
- \$240.00 + \$400.00 allowance for books and fees
- not stated
- 2 years
- available to members of the Canadian Physiotherapy Association with at least 2 years' clinical experience. No contractual obligation is imposed but it is presumed that candidates intend to practice or teach in the profession on completion of the program.

Category	Duration	With dependents (+ tuition)	Without dependents (+ tuition)
Physiotherapy with B.A.	1 & 2 yrs.	\$2000.00	\$1600.00
Occupational Therapy with B.A.	1 year	\$2000.00	\$1600.00
Physiotherapy without B.A. (with certificate)	1 & 2 yrs.	\$1800.00	\$1400.00
Occupational Therapy without B.A. (with certificate)	1 & 2 yrs.	\$1800.00	\$1400.00

SPEECH PATHOLOGIST AND AUDIOLOGISTSUMMARYA. EDUCATION AND TRAINING

1. Length of educational program 2 years post B.A.
2. Length of training program 6 month internship following educational program
3. Kind of program diploma course (in Speech Pathology and Audiology)
4. Number and setting of programs one only in Ontario (University of Toronto, Faculty of Medicine, Division of Rehabilitation Medicine)
5. Availability of additional training none in Ontario; McGill offers program at Masters level.
6. Admission requirements B.A. degree or equivalent (U. of T. accepts R.N. diploma or Elementary Teachers Certificate + experience as equivalent).
7. Fees Academic fees \$450.00 per year
 - (1) Kitchener Waterloo Rotary Club Bursary - \$1500.00 per year - return of service required.
 - (2) Ontario Department of Health Bursaries \$1600 or \$2000 + tuition with degree; OR \$1400 or \$1800 + tuition with certificate but without degree. Return of service required.
8. Availability and amount of bursary assistance

B. OCCUPATIONAL STATUS1. Manpower data (est.)

Number employed - 105 fully qualified + 10 not fully qualified
 - average annual infusion - 20%
 - average annual attrition - 10%

2. Place of employment

hospitals, rehabilitation centres, clinics, special schools for the handicapped, in the regular school system, private practice.

3. Primary function

diagnosis and treatment of individuals suffering from disorders of speech, voice and language which affect the comprehension and expression of communications.

4. Basis of employment	direct service to patients. May work with patients on referral from physician either independently within policies of employing agency or in private practice.
5. Initial Salary Range	\$6200 - \$6900
6, 7, 8. Certification, registration and licensing	none
9. Professional organization	Ontario Speech and Hearing Association (No national organization).

DETAILA. EDUCATION AND TRAINING

The speech pathologist and audiologist is required to complete a two year program following a general B.A. degree or equivalent. After completing the two year program, he or she must put in a six month internship, after which he/she receives a Diploma in Speech Pathology and Audiology.*

There is only one such program in Ontario; it is offered by the Division of Rehabilitation Medicine, the Faculty of Medicine, University of Toronto. Admission requirements for the program are a general B.A. degree from an accredited institution, or equivalent. The University of Toronto accepts an R.N. Diploma or an Elementary Teacher's Certificate plus acceptable working experience as equivalent to a B.A. degree. Academic fees for this course of study are \$450.00 per academic year.

Bursary assistance is available to students in a program leading to a Diploma in Speech Pathology and Audiology. The Kitchener-Waterloo Rotary Club Bursary of \$1500.00 per year is available for two years to a student enrolled in this course. The recipient must work for one year as a speech therapist in the Kitchener-Waterloo Rotary Centre upon completion of her education and training. Ontario Department of Health bursaries for students holding a B.A. degree are available in amounts of \$1600 per year + tuition for ~~students without dependents or \$2000.00 + tuition for students with dependents~~. A student without a B.A. degree but with certificate may receive a bursary of \$1400.00 + tuition (~~without dependents~~) or \$1800.00 + tuition (~~with dependents~~). A return of service is required from the recipient of a government bursary (one year of service for each year of assistance received).

There is no additional training available to the speech pathologist and audiologist in Ontario; McGill University, however, offers a program in this field at the Masters level.

B. OCCUPATIONAL STATUS

Speech pathologists and audiologists of whom there are an estimated 115 employed in Ontario at present (September, 1968)** may be employed in hospitals, rehabilitation centres, clinics, special schools for the handicapped, or in the regular school system. They may also be engaged in private practice. Their primary function is the diagnosis and treatment of disorders of speech, voice and language which affect an individual's comprehension and expression of communications. Speech pathologists and audiologists may also test a client's hearing and instruct him in the use of a hearing aid.

The speech clinician uses some special equipment such as a tape recorder, audiometer, and amplifier; but most of the "tools of treatment" are books, pictures, and materials manufactured by the clinician to suit the needs of the individual patient.

* The U. of T. graduates in Speech Pathology and Audiology are not clinical audiologists. The U. of T. course includes orientation to audiology only. No course in clinical audiology is available in Ontario; such courses may be obtained at McGill University or in the U.S.

** The average annual infusion of Speech Pathologists and Audiologists is estimated at 20% and the average annual attrition at 10%.

The speech pathologist and audiologist may provide treatment to a patient referred by a physician, or he/she may set up a private practice and work independently. The initial salary range of the speech clinician is between \$6200 and \$6900 per annum.

There is, in Ontario, no certification, registration or licensing of speech pathologists and audiologists; however, the diploma holder is entitled to belong to the voluntary organization of the profession, the Ontario Speech and Hearing Association.

SUMMARY

A. EDUCATION AND TRAINING

1. Length of educational program	none at present
2. Length of training program	in-service training of variable length from a few months to several years depending on number and depth of aspects studied.
3. Kind of program	no certificate, diploma or degree awarded.
4. Number and setting of programs	informal training programs conducted by trained prosthetists and orthotists in hospitals, clinics, private shops and rehabilitation centres as staff is required.
5. Availability of additional training	none at present
6. Admission requirements	completion of grade 12 preferred; less formal education may be accepted.
7. Fees	none
8. Bursary assistance	none. Trainee is paid a salary of approximately \$70.00 - \$80.00 per week while being trained.
3. OCCUPATIONAL STATUS	
1. Manpower data (est.)	number employed - 160
2. Place of employment	rehabilitation centres, hospitals, federal government (Department of National Health and Welfare), private orthotic and prosthetic shops.
3. Primary function	<u>prosthetist</u> : the design, fabrication and fitting of artificial limbs. <u>orthotist</u> : the design, fabrication and fitting of orthopaedic appliances
4. Basis of employment	works from medical prescription independently or in cooperation with surgeon, orthopaedist, physiologist and/or physical therapist. Renders direct service to patients.

5. Initial salary range	\$70.00 - \$80.00 per week.
6, 7, 8. Certification, registration and licensing	certification optional by the Canadian Board of Certification for Prosthetists and Orthotists. Certification qualifies individuals to use the initials C.P.O. (C)
9. Professional organization	The Interprovincial Association of Prosthetists and Orthotists of Canada.

DETAILA. EDUCATION AND TRAINING

Although orthotists and prosthetists differ in their duties and functions, they are trained in approximately the same way and have a similar occupational status. These two functionally distinct health disciplines, therefore, will be dealt with in a single profile.

At the present time there is no formal educational program available in Ontario for students who wish to become skilled as orthotists or prosthetists. Seneca College of Applied Arts and Technology was prepared to offer a two-year program in "Prosthetic Techniques" beginning in September 1968. Insufficient registration, however, forced its cancellation until a later date (possibly September 1969).

Orthotists and prosthetists are presently trained by those skilled in the techniques of designing, fabricating and fitting orthotic and prosthetic devices. Training usually takes place in a hospital, rehabilitation centre or private shop at such time as the hospital, clinic or shop requires technicians in this area of specialization. The length of training varies from a few months to several years, depending upon which aspects of the work are learned and in how many different facets of the field the student is trained.

No certificate or diploma is awarded to the trainee when he reaches a certain level of proficiency in his field of training; the skilled orthotist/prosthetist, however, may be certified by passing examinations set by the Canadian Board of Certification for Prosthetists and Orthotists. He is then qualified to use the initials C.P.O. (C) to indicate his certification.

Trainers generally prefer to accept trainees who have completed Ontario grade 12. Students with less formal education may be accepted for training, however, if the trainer feels that they have an aptitude for the work and show personal suitability.

There are no fees for the training "programs" for orthotists and prosthetists, and no bursary assistance is required by trainees, as they are paid a regular salary of between \$70.00 and \$80.00 per week while they are being trained.

B. OCCUPATIONAL STATUS

There are estimated to be 160 orthotists and prosthetists presently employed in Ontario. They are usually employed in rehabilitation centres, hospitals, government (Department of National Health and Welfare), or private orthotic and prosthetic shops.

The primary function of the prosthetist is the design, fabrication and fitting of artificial limbs. The orthotist designs, fabricates and/or fits orthopaedic appliances such as braces, splints and self-help devices.

A fully-trained and qualified orthotist or prosthetist should have basic knowledge in the areas of human anatomy and physiology; the principles of mechanics; the basic theory of metallurgy; the materials used in making orthopaedic and/or prosthetic appliances (e.g. plastics, plaster of paris, leather, metals, etc.); a thorough knowledge of the techniques of measuring for and fitting various appliances; and knowledge of which kind(s) of appliances is (are) most appropriate for various conditions.

The orthotist and prosthodontist work from prescriptions provided by physicians. They may function independently or within the policies of the employing organization. They may work in cooperation with a surgeon, orthopaedist, physiatrist and/or a physical therapist in providing services to their patients.

The orthotist or prosthodontist may expect an initial salary of between \$70.00 and \$80.00 per week from the time he begins his training. As he becomes more skilled his salary is increased; and when he becomes fully qualified to carry out a variety of functions, his salary may be as high as \$10,000.00 to \$12,000.00 per year.

Certification of orthotists and prosthodontists is optional and is the jurisdiction of the Canadian Board of Certification for Prosthetists and Orthotists. Certification qualifies the individual to use the initials C.P.O. (C) after his name.

The professional organization to which prosthodontists and orthotist may belong is the Interprovincial Association of Prosthetists and Orthotists of Canada. Members are not required to be certified.



OPHTHALMOLOGIST

SUMMARY

A. EDUCATION AND TRAINING

1. Length of educational program)
2. Length of training program)
3. Kind of program

5 years after completion of
M.D. degree

4. No. 1 Setting of programs

certificate of specialization
and qualification for Fellowship
in Royal College of Physicians
and Surgeons of Canada.

5. Availability of additional training

Faculties of Medicine at University of Toronto, University of Western Ontario, University of Ottawa, Queen's University. Clinical training and residency in associated hospitals.

6. Admission requirements

refresher courses and continuing education offered by universities and local medical societies.

7 Fees

possession of M.D. degree with
acceptable academic standing.

8 Financial assistance

approximately \$95.00 per year.

B. OCCUPATIONAL STATUS

OCCUPATIONAL SURVEY

1. Manpower data
2. Place of employment
3. Primary function
4. Basis of employment
5. Initial salary range

number employed - certified, 215
not certified, 53

hospitals, clinics, rehabilitation centres, private practice.

examination, diagnosis and treatment of patients with visual disorders and eye disease.

functions within policies of employing organization or (in private practice) functions independently, rendering direct service to patient.

approximately \$20,000.00.

6, 7, 8. Certification, registration
and licensing

licensed as physicians under
Medical Act by College of
Physicians and Surgeons of Ontario,
and registered with Medical Council
of Canada. Certificate of
Specialization issued by College of
Physicians and Surgeons after
physician passes qualifying exami-
nations. Certification, registration
and licensing all mandatory.

9. Professional organization

Ontario Medical Association,
Section of Ophthalmology.

DETAILA. EDUCATION AND TRAINING

After completing a 7-year educational and training program leading to the degree M.D., the ophthalmologist must complete a further program consisting of 5 years of education, clinical work and research before he may be examined for certification as a specialist in ophthalmology or qualify for Fellowship in the Royal College of Physicians and Surgeons of Canada.

This program of studies may be undertaken through the Faculty of Medicine or School of Graduate Studies at the University of Ottawa, the University of Toronto, the University of Western Ontario or Queen's University. Clinical training and residency are arranged in associated hospitals in the university areas. Admission to specialist programs is limited to a small number of candidates; therefore a high academic standing is required for acceptance into the programs.

Fees for specialist programs in ophthalmology are approximately \$95.00 per year. Students are paid an annual salary of approximately \$4,000.00 - \$5,000.00 while serving their residencies in the association hospitals. In addition to this salary, bursary assistance is available. For details see Appendix I.

Refresher courses and continuing education programs in Ophthalmology are offered by universities as well as by local medical and ophthalmological societies.

B. OCCUPATIONAL STATUS

There are presently (September, 1968) 215 certified ophthalmologists who are practising in Ontario.* The Ophthalmologist may be employed in hospitals, clinics, rehabilitation centres and in private practice. His primary function is the examination, diagnosis and treatment of patients with disorders of the visual and related systems. He consults with other physicians in the diagnosis of brain tumours, blood diseases etc., and in the detection of the side effects of various drugs as they affect the eye. He also prevents, diagnoses and treats the ocular complications of kidney disease, industrial poisoning, etc.

In the eye examination, the ophthalmologist estimates visual acuity, measures the range of focus of the eye, examines the external portions of the eye and notes any abnormalities in the lens of the eye. He may determine ocular pressures, and (if indicated) use more refined studies such as gonioscopy, tonography, exophthalmometry, ophthalmodynamometry, etc.

The ophthalmologist renders a direct service to his patients and may be engaged in private practice. If he is employed by a hospital or clinic he functions within the policies of the employing organization, while in private practice he functions independently. In either setting he may expect to receive an initial salary of approximately \$20,000.00 per annum.

* There are also in Ontario 53 physicians who have been educated and trained in Ophthalmology, but who have not, as yet, been certified as specialists in Ophthalmology.

As well as being licensed to practice medicine under the Medical Act by the College of Physicians and Surgeons of Ontario, and registered with the Medical Council of Canada, the ophthalmologist must possess a Certificate of Specialization which is issued by the Royal College of Physicians and Surgeons of Canada after the candidate has passed qualifying examinations set by the College. These examinations may be written after the completion of (a) three years of specialized study and practice in the field of ophthalmology, (b) one year internship, and (c) one year seniorship. He is then eligible for Fellowship in the Royal College of Physicians and Surgeons of Canada.

The voluntary professional organization of ophthalmologists in the Ontario Medical Association, Section of Ophthalmology.

APPENDIX IBursary Assistance Available to Students
of Ophthalmology

Name Medical Research Council - Alexander Pigott Wenher Memorial Trust Fellowships.

Field Ophthalmology and otology.

Value 900 - 1120 (without dependents), or
 1150 - 1370 (with dependents) per annum.

Number Not specified.

Duration 1 academic year.

Conditions Intended for suitably qualified medical graduates who are likely to profit by study at a centre abroad before taking up positions for higher teaching and research.

Name United Cerebral Palsy Clinical Fellowship Program.

Field Post-graduate training in ophthalmology or nine other areas.

Value \$2400.00 - \$4800.00

Number To be decided.

Duration One year.

Conditions Awarded to applicant who intends to place training emphasis on problems of cerebral palsy; graduate of class A medical school in U.S. or Canada, under 35 years of age.

Name E.A. Barker Foundation for Prevention of Blindness, C.N.I.B. Fellowship.

Field Ophthalmology.

Value \$3,000.00

Number 2

Duration one year

Conditions Granted only on the recommendation of the Head of the Department of Ophthalmology, University of Toronto.

OPTOMETRISTSummaryA. EDUCATION AND TRAINING

1. Length of educational program
1 year General Science and
4 years professional; (5 years)
2. Length of training program
none
3. Kind of program
degree, Doctor of Optometry
4. Number and setting of program
one only in Ontario -
University of Waterloo, Faculty
of Science, School of Optometry
5. Availability of additional
training
no further formal training
available in Ontario.
6. Admission requirements
Ontario Grade 13, 4 subjects
comprising 7 credits; 60%
average
7. Fees
\$568.00 per academic year
8. Bursary assistance
no bursary assistance listed
in university calendar or
government bursary listing.

B. OCCUPATIONAL STATUS

1. Manpower data (est.)
number employed - 520
2. Primary Function
detection and correction of
functional vision problems
and recognition of diseases of
the eye
3. Basis of employment
direct service to public. May
be self-employed or may operate
within policies of employing
organization.
4. Initial salary range
from \$2,000.00 (in first year of
private practice) to \$6,500.00
(if employed by another in first
year of practice).
- 5, 6, 7. Certification,
registration and
licensing
registration mandatory by the
Ontario Board of Examiners in
Optometry under the Optometry Act.
8. Professional organization
Optometrical Association of
Ontario.

DETAILA. EDUCATION AND TRAINING

The only School of Optometry in Ontario is located at the University of Waterloo, Kitchener-Waterloo. The School of Optometry (Faculty of Science) offers a five-year program consisting of a one year science program plus four years of professional education and training in optometry. Upon successful completion of this program, the student is awarded the degree Doctor of Optometry.

Admission to the School of Optometry requires that a student complete Ontario Grade 13 or equivalent (4 subjects comprising at least 7 credits, with a 60% average and certain subject specifications). Tuition fees for this course of study are \$568.00 per academic year.

No formal certificate or degree programs at the graduate level are offered for optometrists in Ontario, although seminars, summer courses, and clinics are held by the School of Optometry and the Optometrical Association of Ontario from time to time.

No bursary assistance is available to students of optometry, although students may compete for numerous scholarships and prizes available exclusively to students of optometry.

B. OCCUPATIONAL STATUS

There are approximately 520 registered optometrists practising in Ontario (September 1968). They are almost always self-employed, working either in a private office or in partnership with one or more other optometrists. Occasionally, however, they may do research or survey work, act as consultants in the school systems, or be employed in industry or government positions.

The primary function of the optometrist is the detection and correction of functional vision problems, and the referral of patients showing ocular disease to an ophthalmologist. The diagnostic and treatment procedures used by optometrists involve:

- (1) instructing patients in the correct use of their eyes;
- (2) diagnosing and correcting vision anomalies by determining refractive errors and fitting ophthalmic appliances (e.g. ophthalmic lenses, prisms, contact lenses, filters, occluders, sub-appliances);
- (3) correcting certain anomalies and deviations by vision training and eye exercises (orthoptics).

Optometry is defined in the Optometry Act as follows:

"Optometry means the measurement of, or the attempt to measure by any means, other than the use of drugs the refractive or muscular condition of the eye, the prescribing of any ophthalmic lens or lenses, or the prescribing of any spectacles or eye glasses or ocular calisthenics to any person for the relief of any visual or muscular error or defect of the eye".

Optometry Act, S. 1(e)

The optometrist is usually engaged in private practice and therefore, renders direct assistance to his patients. The optometrist's initial salary range varies greatly depending upon whether he sets up a private practice immediately after graduation, or is employed by another optometrist or by government, industry, etc. If he is in private practice, he may net only \$2,000.00. If he is not self-employed, however, he may expect to make approximately \$6,500.00 in his first year of practice, from corporate practices that employ him.

Registration is mandatory and is regulated by the Ontario Board of Examiners in Optometry under the Optometry Act; and registered optometrists may belong to the Optometrical Association of Ontario.

ORTHOPTISTSUMMARYA. EDUCATION AND TRAINING

1. Length of educational program)
)
2. Length of training program)

3. Kind of program

4. Number and setting of programs

5. Availability of additional training

6. Admission requirements

7. Fees

8. Bursary assistance

18 month programs of combined formal education and practical training

no certificate or diploma awarded but student is a candidate for certification by the American Orthoptic Council.

two in Ontario. Hospital for Sick Children, School of Orthoptics; Ottawa Civic Hospital.

none at present

Ontario grade 13, minimum.

none

N/A. Students paid \$100.00 per month for 16 months and \$200.00 per month for 2 months (while attending American Orthoptic Council Course in U.S.A.)

B. OCCUPATIONAL STATUS

1. Manpower data (est.)

2. Place of employment

3. Primary function

5. Initial salary range

6, 7, 8. Certification, registration, and licensing

9. Professional organization

number employed - 3 full time
- 4 part time
hospitals, clinics, or in association with ophthalmologists in private practice.

measurement and binocular assessment of patients with strabismus; treatment of defective binocular vision, defects in the action of the ocular muscles or faulty visual habits.

\$5,000.00 - \$5,500.00 per annum.

none in Canada at present. Canadian candidates may be certified by American Orthoptic Council.

Canadian Orthoptic Society.

DETAILA. EDUCATION AND TRAINING

At present, there are in Ontario two educational and training programs which may be taken by persons wishing to become orthoptists. Both programs have only recently come into existence and are conducted at the Hospital for Sick Children, School of Orthoptics in Toronto and at the Ottawa Civic Hospital.

These programs are of 18 months' duration and consist of a combination of lectures, special individual instruction, training in orthoptic procedures and a two-month course given by the American Orthoptic Council in some American city. No certificate or diploma is, at present, awarded upon successful completion of the program; but the student is a candidate for certification by the American Orthoptic Council. The minimum admission requirement for the program is completion of Ontario grade 13.

There are no fees for the program. The student taking the course at the Hospital for Sick Children is being paid \$100.00 per month for 16 months and \$200.00 per month for the two months she spends in the United States attending the course given by the American Orthoptic Council. This stipend is being paid by the Women's Auxiliary of the Hospital for Sick Children. In future however, financial assistance will be obtainable in the form of a government bursary. *Bursary assistance is available on the amount of \$1000.00 a year for two years.*

B. OCCUPATIONAL STATUS

The orthoptist, of whom there are at present 7 employed in Ontario, is usually employed in a hospital, a clinic, or in association with several ophthalmologists in private practice. Her primary function is to assess and treat defective binocular vision, defects in the action of the ocular muscles, faulty visual habits and amblyopia by means of eye exercises and other non-medical, non-surgical methods of correction. Referral to an orthoptist by an ophthalmologist is required before the orthoptist may begin treatment; however, the orthoptist may be self-employed (in private practice) and render a direct service to her patients. If employed by a hospital, clinic or other agency, she functions within the policies of the employing organization.

The initial salary range of the orthoptist is approximately \$5,000.00 to \$5,500.00 per annum.

There is at present no certification, registration or licensing of orthoptists in Canada. In 1970, the Canadian Orthoptic Council will begin to set examinations for certification or registration of orthoptists in Canada. In the meantime, however, Canadian candidates for certification as orthoptists are permitted to try certification examinations set by the American Orthoptic Council.

The newly chartered Canadian Orthoptic Society is the voluntary professional organization for orthoptists in Canada.

OPTICIANSUMMARYA. EDUCATION AND TRAINING

1, 2. Length of educational and training program

3. Kind of program

4. Number and setting of programs

5. Availability of additional training

6. Admission requirements

7. Fees

8. Bursary assistance

training only, OR education only, OR education and training, 1-2 years.

educational program, certificate

apprenticeship with optometrist or ophthalmic dispenser. Also 2-year correspondence course by Board of Ophthalmic Dispensers; also one-year course for optical technicians given by Georgian CAAT, Barrie.

none

Grade 10 minimum

fees for correspondence program \$150.00 per year; fee for CAAT program \$106.00

none

B. OCCUPATIONAL STATUS

1. Manpower data (est.)

number employed - 650

2. Place of employment

offices, stores, laboratories

3. Primary function

two classifications: (1) dispensing optician - fits and adapts glasses in accordance with prescription; (2) laboratory optician - manufactures or assembles glasses to given specifications

4. Basis of employment

may be self-employed but works under prescription of optometrist or ophthalmologist.

5. Initial salary range

\$75.00 to \$100 per week

6, 7, 8. Certification, registration and licensing

registration optional by Board of Ophthalmic Dispensers under Optometrist Act.

9. Professional organization

Canadian Guild of Dispensing Opticians (Ont. Branch)

DETAILA. EDUCATION AND TRAINING

There are two classifications of opticians, each of which has a separate function and is trained differently. The dispensing optician usually becomes qualified through participation in a combined educational and apprenticeship program. The apprenticeship is carried on while the learning optician is in the employ of an optometrist or ophthalmic dispenser. At any time during this apprenticeship he may register for a two-year correspondence course which is provided by the Board of Ophthalmic Dispensers in Toronto. In June of each year a series of lectures is given by the Board in Toronto which the apprentice is required to attend. In addition, an examination must be written at the end of the second year of the course. The apprenticeship program, also, is normally of two years' duration. The cost of the correspondence course and yearly lecture series is \$150.00 per year; no bursary assistance is available to cover the cost of this program. This is the only program available in Ontario for training the dispensing optician.

The laboratory optician (or optical technician) may be trained in an apprenticeship program conducted in a laboratory under the direction of a qualified optical technician. An apprenticeship such as this is of indefinite length and no certificate or diploma is awarded on its completion. As an alternative to an apprenticeship in a laboratory, the optical technician may enrol in a one-year course of study offered by Georgian College of Applied Arts and Technology, Barrie, Ontario. A certificate is awarded upon completion of this program. Fees for this program are \$106.00. Admission to either an apprenticeship program or an educational program requires a minimum of Grade 10 education.

B. OCCUPATIONAL STATUS

There are an estimated 650 opticians presently employed in Ontario (Sept. 1968). The dispensing optician is usually employed in a private office, store, or other retail establishment. His primary function is to fit and adapt spectacles in accordance with a prescription furnished by an optometrist or ophthalmologist. He does not examine the eyes or vision of his client or customer, but adds to the directions contained in the written prescription. He orders the prescription from an optic laboratory and on return of the finished glasses is responsible for verifying the accuracy of the original prescription. If he owns his own business he is also responsible for display, bookkeeping, purchasing supplies and controlling accounts.

The optical technician is employed in an optical laboratory. If the laboratory is large, he usually becomes skilled in one aspect of processing (e.g. blocking, lay-out, etc.). In a smaller laboratory it is possible for a single person who possesses a wider range of skills to carry out all aspects of the manufacturing and assembling.

The optician renders a direct service to his customer but depends upon the optometrist or ophthalmologist to supply him with the prescription from which he works.

The apprentice optician at either the laboratory or dispensing level usually obtains a starting salary of \$45.00 - \$60.00 per week in the beginning and \$75.00 per week at the end of his apprenticeship. A well-trained laboratory

optician might expect to receive up to \$100.00 per week, or \$150.00 per week as a supervising optician. An ordinarily employed dispensing optician would receive from \$5,200 to \$7,000 per annum. If he had a large business or was the manager of a large store, however, his income might be as high as \$15,000 per year.

Opticians may be registered by the Board of Ophthalmic Dispensers under the Optometry Act but may work as opticians under the supervision of an optometrist if not registered.

Opticians may become members of the Canadian Guild of Dispensing Opticians.



MEDICAL LABORATORY TECHNOLOGISTSUMMARYA. EDUCATION AND TRAINING

1. Length of educational program) 2-3 years. combined. Includes at least 12 months' internship in a medical laboratory

2. Length of training program)

3. Kind of program both formal educational and apprenticeship programs leading to certificate and registration.

4. Number and setting of programs 60 approved programs in Ontario: 56 in hospitals; Algonquin College of Applied Arts and Technology; Toronto Institute of Medical Technology; Hamilton and District School of Medical Technology, London Regional School of Medical Technology.

5. Availability of additional training Toronto Institute of Medical Technology offers advanced training and refresher courses.

6. Admission requirements Algonquin C.A.A.T. requires completion of grade 12. All other courses require completion of Ontario grade 13 or equivalent.

7. Fees Algonquin C.A.A.T. - \$175.00 per academic year.

8. Bursary assistance students receive \$125.00 per month during training in hospital affiliated and sponsored programs.

B. OCCUPATIONAL STATUS

1. Manpower data (est.) number employed - 3,400

2. Place of employment hospitals, medical clinics, doctors' offices, government laboratories, universities, biological supply houses, industrial medical laboratories.

3. Primary function performs tests and experiments on blood, body fluids and tissues, which are requested by doctor for information or regarding diagnosis and treatment of patients.

4. Basis of employment	performs duties at request of laboratory directors.
5. Initial salary range	C.S.L.T. suggested minimum: \$4560.00 - \$4920.00 per annum
6, 7, 8. Certification, registration and licensing	registration mandatory; the jurisdiction of the Canadian Society of Laboratory Technologists.
9. Professional organization	Canadian Society of Laboratory Technologists and Ontario Society of Medical Technologists.

A. EDUCATION AND TRAINING

The medical laboratory technologist in Ontario must complete a combined educational and training program of 2-3 years' duration, consisting of 12 months of classroom instruction (or 2 years in the Algonquin College program) followed by 12 months' experience in a laboratory setting. On successful completion of this program, the student receives a certificate which qualifies him to write registration examinations giving him the R.T. (Registered Technologist) Diploma in Laboratory Technology.

There are 60 approved programs in medical technology in Ontario. Fifty-six of these are conducted in hospitals. In addition to these, centralized training programs offering the didactic portion of the course are offered at the Toronto Institute of Medical Technology, the Hamilton and District School of Medical Technology, the London Regional School of Medical Technology, and Algonquin College of Applied Arts and Technology. The 12 month internship in a medical laboratory is arranged for students in the non-hospital programs through affiliated hospitals.

The Toronto Institute of Medical Technology offers advanced training and refresher courses which, together with advanced work experience, allow the registered technologist to proceed towards Advanced Registration which is granted to technologists who have suitable qualifications and pass examinations set by the C.S.L.T.

Admission to the three-year Algonquin C.A.A.T. program requires that the applicant have completed grade 12 successfully. All other programs require the completion of Ontario grade 13 with 7 credits including Mathematics, Chemistry and either Biology or Physics.

Fees for the Algonquin College program are \$175.00 per academic year. There are no fee for the remaining 59 programs, and students in these programs are given a monthly stipend of \$125.00 while they are being trained. No bursary assistance is available for students in any of these programs.

B. OCCUPATIONAL STATUS

The medical laboratory technologist of whom there are an estimated 3,400 employed in Ontario (September 1968) may be employed in hospitals, medical clinics, doctors' offices, government laboratories, universities, biological supply houses or industrial medical laboratories. His primary function is to perform tests and experiments on blood, body fluids and tissues, at the request of a doctor; and to supply the doctor with information which will be of use to him in the diagnosis, treatment and care of his patients. All activities of the technologist are performed at the request of senior laboratory personnel. The technologist makes no diagnoses on the bases of the tests he has performed.

The Canadian Society of Laboratory Technologists (the national professional organization) recommends that the initial salary of a medical laboratory technologist be approximately \$4,560.00 - \$4,920.00 per annum.

RADIOLOGICAL TECHNICIAN

SUMMARY

A. EDUCATION AND TRAINING

1. Length of educational program)	Not less than 24 months for diagnostic or therapeutic techniques; and not less than 36 months for both combined
2. Length of training program)	
3. Kind of program	certificate - 2 - 3 years of combined theory and practice.
4. Number and setting of programs	64 hospitals; 4 other training centres for diagnostic radiography; 5 other training centres for therapeutic radiography.
5. Availability of additional training	some advanced and refresher courses available.
6. Admission requirements	minimum secondary school graduation at 4th level of the 5 year program; a 60% average; 4 options, mathematics and science; or Ontario Grade 1 in any program; or R.N. diploma
7. Fees	none
8. Bursary assistance	none. Hospitals pay each student \$125.00 per month during the course.

B. OCCUPATIONAL STATUS

1. Manpower data (est.)	Number employed 2,000.
2. Place of employment	hospitals, offices of radiologists, group practice clinics.
3. Primary function	prepares patients for X-Ray examination or treatment; operates X-Ray equipment; processes films; marks film for identification purposes.
4. Basis of employment	under direction of physician.
5. Initial salary range	\$4,500-\$5,100 per annum.
6, 7, 8. Certification, registration, licensing	Registration and Licensing by Board of Radiological Technicians of Ontario under Radiographers Act, 1962.
9. Professional organization	Canadian Society of Radiological Technicians (Ontario Branch)

DETAILA. EDUCATION AND TRAINING

There are two fields of radiology in which a radiological technician may be engaged: diagnostic radiology and therapeutic radiology. A few technicians work in both fields.

The combined educational and training program requires not less than 24 months for diagnostic or therapeutic techniques, and not less than 36 months for training in both fields. In Ontario there are 64 hospitals which conduct education and training programs for radiological technicians as well as 4 other training centres for training in diagnostic radiography and 5 other centres for training in therapeutic radiography. Some refresher courses are also available for radiological technicians.

Admission requirements for the certificate programs are secondary school graduation at the fourth level of the five year program, with an average of 60%; or completion of Grade 13 in any program; or qualification as a registered nurse.

There are no fees for these programs, and hospitals pay each student a stipend of \$125.00 per month during the two years he is being trained.

B. OCCUPATIONAL STATUS

The radiological technician, of which there are approximately 2,000 in Ontario, may be employed in a hospital, a radiologist's office, or a group practice clinic. The primary function of the technician is to assist the doctor(s) in preparing the patient for X-Ray examination or treatment. He operates the X-Ray equipment by the manipulation of controls which govern the exposure factors, and is responsible for positioning the patient so that the appropriate areas of the body are correctly radiographed. He also takes care of film processing and marks the film for identification purposes. His duties are carried out under the direction of a physician.

If accepted for the examinations set by the Canadian Society of Radiological Technicians, and if successful in passing these examinations, candidates are admitted to full membership in the C.S.R.T. A certificate is granted indicating that they have qualified for such membership and are R.T. (R) (R-Radiography), or R.T. (T) (T-Therapy). Licensing of radiological technicians, Ontario is the jurisdiction of the Board of Radiological Technicians, Province of Ontario, under the Radiographers Act, 1962.

ELECTROENCEPHALOGRAPHY TECHNICIAN

SUMMARY

A. EDUCATION AND TRAINING

1. Length of educational program none

2. Length of training program 6 months to 2 years depending on degree of proficiency attained and background and aptitude of trainee.

3. Kind of program on-the-job training. No certificate or diploma awarded.

4. Number and setting of programs technicians trained in hospitals in Kingston, London, Ottawa and Toronto.

5. Availability of additional training no formal advanced training. Canadian Association of EEG Technicians, and training hospitals conduct seminars and hold lectures from time to time.

6. Admission requirements trainers prefer applicants with Ontario grade 13 and some nursing experience (e.g. R.N. or R.N.A.).

7. Fees none

8. Bursary assistance no bursary assistance required. Trainees are paid salary of \$275.00 - \$300.00 per month while being trained.

B. OCCUPATIONAL STATUS

1. Manpower data (est.) number employed - 60-75

2. Place of employment most technicians employed in hospitals. A few employed in private laboratories.

3. Primary function operation of EEG equipment; preparation of patient for taking of record; taking records; recognizing gross abnormalities in records.

4. Basis of employment technician operates within the policies of the employing organization, rendering a service directly to the patient. Fully trained technicians operate independently but are responsible to the laboratory supervisor, and indirectly to the head of the hospital department within which the EEG laboratory is operated.

5. Initial salary range variable. Ranges from \$339.00 per month to \$550.00 per month, higher salaries being paid by private laboratories.

6. Certification, registration and licensing registration optional by Canadian Association of Electroencephalographic Technicians.

7. Professional organization Canadian Association of Electroencephalographic Technicians, full members must be registered.

DETAILA. EDUCATION AND TRAINING

There is no formal educational program for EEG technicians in Ontario. Technicians are trained in informal in-service training programs which are of 6 months to 2 years' duration, depending on the degree of proficiency the technician wishes to attain and the background and aptitude of the trainee. A technician is usually able to take a record without supervision after approximately 6 months' training, and is usually fully qualified in all aspects of electroencephalography after 1-2 years. Because they have a basic knowledge of anatomy, physiology and patient care, trainees with a background in nursing (R.N.'s or R.N.A.'s) can usually be trained in a shorter time than trainees without nursing experience.

Although there are no formal requirements for admission to training programs, hospitals prefer trainees who have completed Ontario grade 13 and who have some background in nursing. Five training programs are conducted in Ontario, in hospitals in Kingston, London, Ottawa and Toronto, two Toronto hospitals being used for training purposes.

No certificate or diploma is awarded upon completion of training and there is no formal advanced training available in electroencephalographic techniques. The Canadian Association of Electroencephalographic Technicians (C.A.E.T.), and the training hospitals, however, do conduct seminars and hold lectures from time to time which are designed to augment and up-date the knowledge of EEG technicians.

There are no fees for the training programs offered to EEG technicians, and no financial assistance is required, as trainees are paid a regular salary of approximately \$275.00 - \$300.00 per month while they are being trained.

B. OCCUPATIONAL STATUS

At the present time there are estimated to be between 60 and 75 EEG technicians employed in Ontario. A large majority of technicians is employed in hospitals, the remainder being employed in private laboratories.

The primary functions of the EEG technician are: (1) the operation of the electroencephalograph. The technician should have some knowledge of how the electrical apparatus works, be able to operate it, and have the ability to recognize malfunctions in the equipment. (2) The technician is responsible for preparing the patient physically and psychologically for the taking of the record. This includes eliciting the patient's cooperation, instructing him with regard to what will be expected of him, informing him of the process which will be taking place, and preparing him by placing the electrodes in the proper positions for recording. (3) The third function of the EEG technician is to take the electroencephalogram and to recognize any gross abnormalities in it. The technician is not responsible for interpreting the record, although it is advantageous for him to be able to distinguish a normal record from an abnormal record, and to be able to differentiate among various kinds of abnormalities.

The fully qualified EEG technician may operate independently (i.e. without supervision) but is responsible to the laboratory supervisor and indirectly to the head of the hospital department within which the EEG laboratory is operated. The technician also functions within the policies of the employing organization and renders a service directly to the patient.

The initial salary of the trained EEG technician is extremely variable, depending upon the policies of the employing hospital or laboratory. The salary range varies between \$339.00 and \$550.00 per month (\$4068.00 and \$6600.00 per annum). Higher salaries are generally paid to technicians in private laboratories than to those in hospital laboratories.

Registration of EEG technicians is optional and is the jurisdiction of the Canadian Association of Electroencephalographic Technicians (C.A.E.T.). Candidates for registration must have completed at least one year's training, had a specified amount of experience, and pass a certification examination. Successful candidates may use the designation R.E.T. (Registered Electroencephalographic Technician).

The voluntary professional organization for EEG technicians is the C.A.E.T. All technicians employed in EEG laboratories may become associate members of the Association. Full members, however, must be registered technicians.

ELECTROCARDIOGRAPHY TECHNICIAN

SUMMARYA. EDUCATION AND TRAINING

1. Length of educational program)
2. Length of training program)

no prescribed educational program at present. Apprenticeship training programs of no specified length, usually 3-6 months depending on individual.

3. Kind of program

no certificate or diploma awarded.

4. Number and setting of programs

most hospitals in Ontario train their own ECG technicians

5. Availability of additional training

in-service training in ECG continues with experience; also general training in other specialized laboratory techniques available. Training may be used toward certification as Medical Laboratory Technologist

6. Admission requirements

most training programs prefer completion of Ontario grade 13, but accept grade 12 provided applicant shows personal suitability.

7. Fees

none

8. Bursary assistance

N/A. Students being trained as ECG technicians are paid approximately \$300.00 per month during in-service training period.

B. OCCUPATIONAL STATUS

1. Manpower data (est.)

number employed - 150

2. Place of employment

hospitals, clinics, laboratories

3. Primary function

preparation of patient for ECG; operation of electrocardiographic equipment and, with increased experience, recognition of gross abnormalities in electrocardiogram

4. Basis of employment

direct service to patient. Functions within policies of employing organization, and is responsible to laboratory supervisor.

5. Initial salary range	\$300.00 per month initially. After 8-10 months experience, \$390.00 per month.
6, 7, 8. Certification, registration and licensing	none
9. Professional organization	none

DETAILA. EDUCATION AND TRAINING

At present, electrocardiography technicians may be trained in most hospitals in Ontario, in apprenticeship programs which are conducted by staff members within the hospitals where the technicians are to be employed. These programs are of no specified duration, and consist of a combination of formal lectures and practical in-service training. Technicians are usually able to operate the electrical equipment involved in taking ECG's within 2-3 weeks, and are usually able to detect accurately gross abnormalities in electrocardiograms in 3-6 months after beginning their training.

No certificate or diploma is awarded to the electrocardiography technician, and there is, at present, no formal educational program in Canada for training ECG technicians. A formal program of this kind was begun within the Toronto General Hospital, but had to be discontinued when the instructor left the country. It is expected that this program will be continued at a later date.

In-service training in electrocardiography continues with experience and general training in other specialized laboratory techniques (such as blood analysis, urinalysis etc.) may also be given to ECG technicians. This laboratory training may be used toward certification as a Medical Laboratory Technologist.

Hospitals prefer applicants for the position of ECG Technician to have completed Ontario grade 13. Grade 12 graduates are accepted, however, provided they show indications of being suitable for laboratory work.

There are no fees for these training programs, and students are paid approximately \$300.00 per month while they are being trained as Technicians.

B. OCCUPATIONAL STATUS

There are an estimated 150 electrocardiography technicians employed at the present time in Ontario. They are generally based in hospitals, and provide the greater portion of their services directly to the hospitals in which they are employed. Hospitals, however, may provide services to clinics and to general practitioners (G.P. Clinics), and technicians may devote a portion of their time to providing services to these outside organizations under the direction of the employing hospital.

The primary function of the electrocardiography technician is the preparation of the patient for the E.C.G., the operation of the electrocardiographic equipment and, (after he/she has gained sufficient instruction and supervised experience) the recognition of gross abnormalities in the electrocardiogram.

The ECG technician, thus, renders a direct service to the patient, functions within the policies of the employing organization and is responsible to the laboratory supervisor.

During the training period and for the first 2-3 months following his/her training the ECG technician may expect to receive a salary of approximately \$300.00 per month. After this time the technician's salary will be raised to approximately \$390.00 per month (or \$4,680.00 per annum) over a period of 6-8 months.

There is, in Ontario, no certification, registration or licensing of electrocardiography technicians and no voluntary professional organization to which ECG technicians may belong.



PHARMACISTSUMMARYA. EDUCATION AND TRAINING

1. Length of educational program 4 years

2. Length of training program 12 months

3. Kind of program degree - B.Sc.Phm.

4. Number and setting of program one in Ontario - University of Toronto Faculty of Pharmacy. First year (Pre-pharmacy) at Ottawa University and University of Windsor.

5. Availability of additional training University of Toronto offers M.Sc.Phm., also Ph.D. in pharmaceutical chemistry. Residency programs in Hospital Pharmacy are offered in five hospital

6. Admission requirements Ontario Grade 13; (4 subjects comprising at least 7 credits) 60% average; some specified subjects.

7. Fees \$490.00 per academic year.

8. Bursary assistance see Appendix I

B. OCCUPATIONAL STATUS

1. Manpower data number employed - 3900
average annual infusion - 150
average annual attrition - 2%

2. Place of employment community pharmacies, clinic pharmacies, pharmaceutical manufacturing companies, laboratories, hospital pharmacies, government departments.

3. Primary function prepares, dispenses, analyzes drugs; interprets and dispenses prescriptions; supplies information on drugs and medicines to prescribers and to public.

4. Basis of employment direct assistance.

5. Initial salary	\$7,500 - \$10,000 per annum
6, 7, 8. Certification, registration and licensing	a certificate of registration from the Ontario College of Pharmacy and its annual renewal are mandatory under the Pharmacy Act. The Pharmacy Examining Board of Canada provides a medium for interprovincial transfer of registration.
9. Professional organizations	Ontario Pharmacists' Association Canadian Society of Hospital Pharmacists (Ontario Branch) and local associations.

DETAILA. Education and Training

The pharmacist is required to have completed a four-year educational program leading to a B.Sc.Phm. degree, as well as a twelve-month apprenticeship-internship period before he can be registered. The apprenticeship consists of two three-month periods normally served between the second and third, and third and fourth years of the academic program, and a six-month internship period served after satisfactory completion of both the academic program and apprenticeship. The practical training must be served in a training pharmacy under a registered preceptor.

The only complete four year program in Ontario is offered by the University of Toronto, Faculty of Pharmacy. A first year Pre-pharmacy program may be taken at Ottawa University or the University of Windsor. Admission to second year may also be granted to a limited number of applicants from first or higher years of suitable university science courses. The School of Graduate Studies at the University of Toronto also offers programs leading to the advanced degrees of M.Sc.Phm. and, in Pharmaceutical Chemistry, the Ph.D. Five hospitals, in conjunction with the Faculty of Pharmacy, offer post-graduate residency programs in Hospital Pharmacy.

Admission to the B.Sc.Phm. program requires that the student have completed Ontario grade 13, (4 subjects comprising at least 7 credits including a language, Mathematics A, Physics and Chemistry). Because the number of applicants currently exceeds the number of places available, not all applicants who meet the minimum requirements can be admitted. Academic fees for this program are \$490.00 per academic year. Bursary assistance is available to Pharmacy students in each of the four years of study (see appendix I for details).

B. Occupational Status

At present (September 1968), there are employed in Ontario approximately 3,900 pharmacists. The average annual infusion into the profession is estimated at 150; and the annual rate of attrition at 2%.

Pharmacists may be employed in community pharmacies, clinic pharmacies, pharmaceutical manufacturing companies, laboratories, hospital pharmacies, or various government departments (e.g. Department of National Health and Welfare). In a community pharmacy and a clinic pharmacy the primary function of the pharmacist is to interpret, prepare and dispense drugs prescribed by physicians and to maintain all necessary records relating thereto. He serves as a source of information concerning drugs and medicines to both prescribers and the public. In a pharmaceutical laboratory he may be responsible for the manufacture and quality control of drugs; and in hospital pharmacies he is involved not only in dispensing but also in maintaining an efficient distribution system for drugs to wards and patients, and in providing a drug information service to the professional staff. Some graduates in Pharmacy are employed as analysts and inspectors by government departments. Therefore, although the community pharmacist is dependent on the physician for prescribing drugs, he is generally independent of direction or supervision and renders direct assistance to his customers, clients or employers. The initial salary range of the registered pharmacist is approximately \$7,500.00 - \$10,000.00 per annum.

Registration of pharmacists who wish to practice in Ontario is mandatory under the Pharmacy Act. Registration is the jurisdiction of the Ontario College of Pharmacy. A pharmacist may also be registered by the Pharmacy Examining Board of Canada which conducts examinations based on academic standards acceptable to participating provincial statutory bodies (all provincial statutory bodies participate except that of Quebec). To these examinations are admitted candidates who are graduates of Schools of Pharmacy and courses approved by the Canadian Conference of Pharmaceutical Faculties and who submit a statement of qualification from a provincial statutory body. The Board maintains a registry of all persons who have been granted certificates of qualification by the Board. These persons are eligible for registration in any of the nine participating provinces when they have met specified non-academic requirements.

Only registered pharmacists may become full members of the Canadian Pharmaceutical Association and the Ontario Pharmacists' Association.

BURSARY ASSISTANCE AVAILABLE TO STUDENTS
OF PHARMACY IN ONTARIO

Thunder Bay Pharmaceutical Association Bursary
Value - \$200.00

Conditions - Awarded to a student from O.P.A.
district No. 15. The award is made
to a student who has successfully
completed the first year at Lakehead
College or at the Faculty of Pharmacy.

Rho Pi Phi Bursary
Value - \$200.00

Conditions - Awarded on the basis of financial need a
and of satisfactory academic standing
in the Ontario Grade 13 examinations.

Rexall Drug Limited Bursary
Value - \$400.00

Conditions - Awarded on the basis of financial need
and satisfactory standing at the examin-
ations of the third year. Candidates must
have elected the general practice option
of the fourth year.

Ladies Auxiliary to Toronto Pharmacists Bursaries
Value - \$200.00 - \$300.00

Conditions - Awarded to students in the first,
second, third or fourth years who
have demonstrated financial need and
who obtain satisfactory academic
standing.

United Casualty Agencies Bursaries
Value - \$200.00

Number - 2
Conditions - Awarded to students who have demonstrated
academic proficiency and financial need.

Pharmacy Foundation Scholarships
Value - \$100.00 each

Number - 6-7
Conditions - Awarded to students entering the second,
third and fourth years, on the basis of
financial need and academic standing
(at least second class honours).

Ladies Auxiliary Admission Bursary

Value - \$300.00

Conditions - Awarded on the basis of financial need and satisfactory academic standing.

Brant Pharmacists' Association Bursary

Value - \$200.00

Conditions - Awarded to a student entering the Faculty of Pharmacy from a Brantford High School.

Essex County Pharmacists' Association Bursary

Value - \$350.00

Conditions - Awarded to a student entering Faculty of Pharmacy from a high school in Essex County.

Hamilton Ladies' Auxiliary Bursary

Value and Number - One bursary of \$400.00 or 2 bursaries of \$200.00 each.

Conditions - Awarded to (a) candidate(s) from a secondary school in the Hamilton area on the basis of character, leadership, financial need, and academic standing.

London Pharmacists' Association Scholarship

Value - \$250.00

Conditions - Awarded to a student from a secondary school in the London area.

Ottawa Pharmacists' Association Bursary

Value - \$350.00

Conditions - Awarded to a student from a secondary school in Ottawa, Eastview or Rockcliffe.

Quinte District Pharmacists' Association Bursary

Value - \$200.00

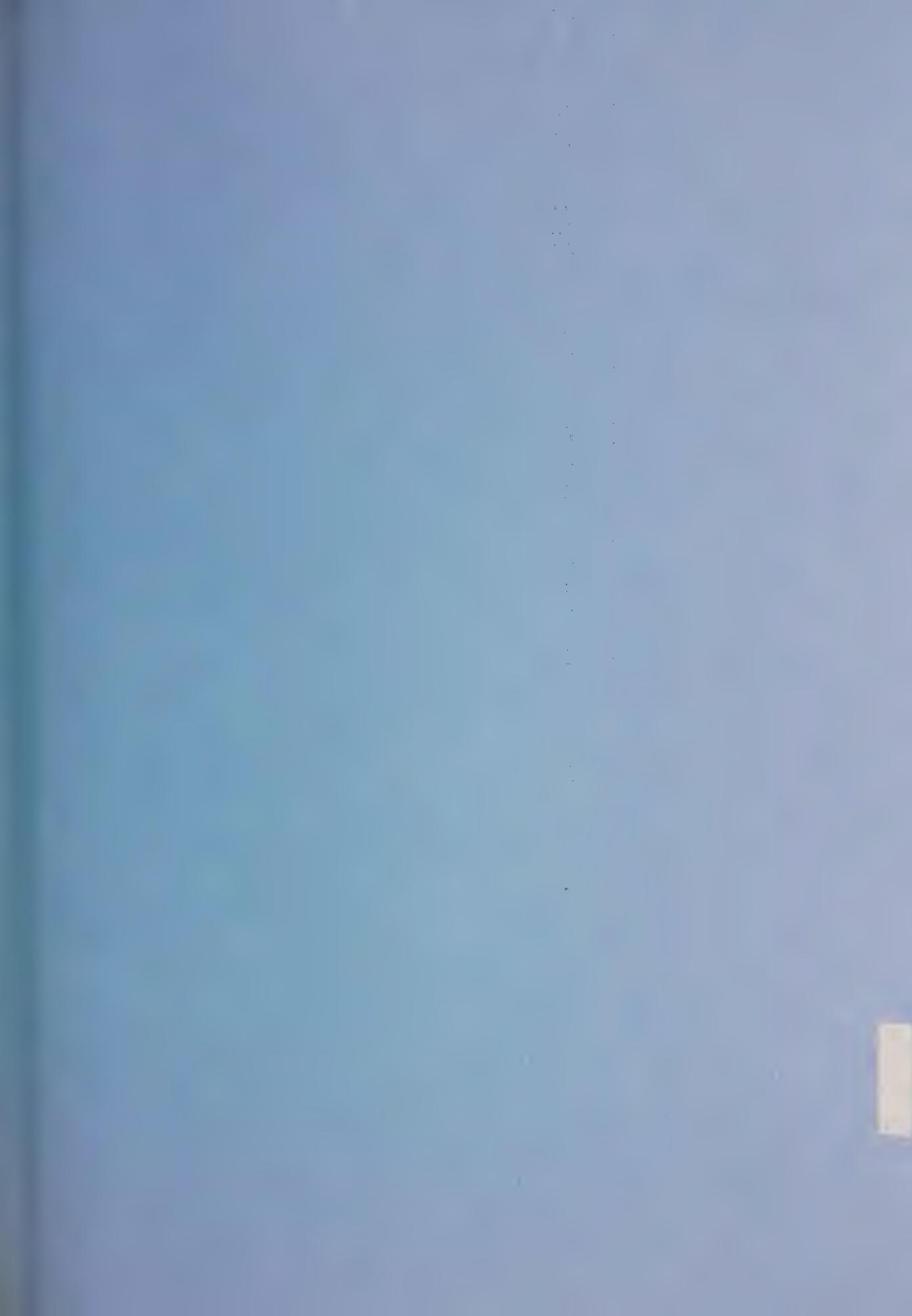
Conditions - Awarded to a student from a secondary school in the Quinte District.

Pharmacy Alumni Association Bursaries

The Pharmacy Alumni Association provides bursaries for deserving students who without financial assistance cannot continue their formal education.

The Family Bursary Fund

This fund provides one or more bursaries to a total annual value of an income from the capital sum of \$10,000.00 for students registered in the second or higher year of any degree course, provided they have financial need and satisfactory academic standing.



DENTISTSUMMARYA. EDUCATION AND TRAINING

1. Length of educational program
Western - 4 years after 2 years university.
University of Toronto - 4 years after 1 year university.

2. Length of training program
N/A

3. Kind of program
Degree D.D.S.

4. Number and setting of program
Two in Ontario:
University of Toronto,
Faculty of Dentistry;
University of Western Ontario,
Faculty of Dentistry.

5. Availability of additional training
University of Toronto advanced degrees, diplomas, occasional studies, and continuing education available.
University of Western Ontario, advanced degrees and continuing education.

6. Admission requirements
University of Toronto: successful completion of one year of a university program beyond Ontario grade 13 (preferably first year General Science Program. Western: successful completion of second year of Honours program or General Program in Natural Sciences with Organic Chemistry.

7. Fees
University of Toronto: range from \$1,029.00 in first year to \$773.00 in fourth year.
Western: range from \$1,375.00 to \$1,450.00.

8. Bursary assistance
See Appendix I.

B. Occupational Status

1. Manpower data (est.)
Number employed - 3,000.
Average annual infusion - 180
Average annual attrition -
3.5%
2. Place of Employment
private practice, hospitals,
industries, school boards,
armed forces, public health
agencies.
3. Primary Function
treatment of ailments and
abnormalities of the hard and
soft tissue of the mouth.
4. Basis of Employment
direct assistance, private
practice.
5. Initial salary range
\$15,000 - \$20,000 average
excluding equipment.
6. Certification, registration,
7 licensing
&
8
- licensing mandatory under the
Dentistry Act by Board of
Directors of the Royal College
of Dental Surgeons of Ontario.
Annual renewal of registration
required.
9. Professional organization
Canadian Dental Association
and Ontario Dental Association.

DETAILA. EDUCATION AND TRAINING

There are two universities in Ontario which offer an educational program leading to a D.D.S. degree. These are the University of Toronto, Faculty of Dentistry, and the University of Western Ontario, Faculty of Dentistry. The professional program at the University of Toronto is of four years' duration, and requirements for admission are successful completion of one year of an acceptable university program beyond Ontario grade 13. The program at Western is of four years' duration, and admission requires completion of the second year of an Honours Program or second year of a General Program in Natural Sciences provided Organic Chemistry is elected in the second year.

Fees for the dentistry program range, at University of Toronto, from \$1,029.00 in the first year to \$773.00 in the fourth year. At Western fees range from \$1,375.00 to \$1,450.00. The variability in fees is due to an instrument fee which varies from year to year. Bursary assistance is available to Dentistry students in amounts varying from \$50.00 to \$500.00. For details see Appendix I.

Additional training and education in the field of dentistry is available at the University of Toronto and the University of Western Ontario. Programs are available which lead to the degrees B.Sc.D., M.Sc.D., and Ph.D. Postgraduate diploma courses are available in the fields of Dental Public Health, Oral Surgery and Anaesthesia, Orthodontics, Paedodontics and Periodontics. Individual courses may also be taken by dentists who do not wish to interrupt their practices; and short refresher courses are available to the dentist who wishes to review his knowledge of particular fields of dentistry or acquaint himself with newer methods and procedures in various clinical areas. In addition to these courses and programs, and in co-operation with the Board of Directors of the Royal College of Dental Surgeons of Ontario, lectures and clinics on a variety of subjects pertinent to dentistry are presented to meetings of local dental societies throughout the province.

B. OCCUPATIONAL STATUS

There are estimated to be 3,000 dentists presently employed in Ontario (September 1968). The average annual infusion into the profession is approximately 180, and the average annual attrition 3.5 per cent.

Although most dentists are engaged in private practice, some are employed by hospitals and industries, by government and public health agencies, school boards and in the armed forces.

The dentist's primary function is the prevention of dental diseases and treatment of ailments and abnormalities of the hard and soft tissues of the mouth. This includes extracting, filling, cleaning and replacing teeth; treating diseased tissue of the gums; performing surgical operations on the jaw or mouth; making and fitting artificial teeth; and making X-rays of the teeth, gums and jaws.

While setting up a private practice, the dentist must assume large expenditures for supplies and equipment but most dental supply firms offer attractive long term payment plans. The dentist may expect to make an initial average income of approximately \$15,000.00 per year.

Licensing of dentists is mandatory under the Dentistry Act and is the jurisdiction of the Board of Directors of the Royal College of Dental Surgeons of Ontario. Examinations are held by the College at least once each year. After being licensed, the dentist may become a member of the Canadian Dental Association, and the Ontario Dental Association.

Bursary Assistance Available to Students of
Dentistry

Name	- Ontario Department of Health Bursaries
Value	- \$1,500.00 without or \$2,000.00 with dependents <i># 3000</i>
Number	- -
Duration	- maximum 4 years
Conditions	- available to students after they have been admitted to a course in dentistry. Each recipient has an obligation to practise in a location acceptable to the Minister of Health, 1 year for each year of assistance received <i>Completed the 1st year of the course</i>
Name	- Julius J. Levine Memorial Bursary
Value	- \$50.00
Number	- one
Duration	- one year
Conditions	- awarded to a Dentistry student enrolled in the third year based on financial need and satisfactory academic standing
Where tenable	- University of Toronto
Name	- Ontario Dental Association Bursaries
Value	- \$500.00 total
Number	- one or more
Duration	- one year
Conditions	- awarded to student(s) in any year who demonstrate(s) financial need and satisfactory academic standing
Where tenable	- University of Toronto; University of Western Ontario
Name	- James Gestie Perkin Bursary
Value	- \$50.00
Number	- one
Duration	- one year
Conditions	- awarded to a third year student with acceptable academic standing in Prosthodontics in second year who demonstrates financial need.
Where tenable	- University of Toronto

Name - Dental Alumni Association Bursaries
 Value - \$200.00
 Number - 2
 Duration - one year
 Conditions - available to students enrolled in any year of the course in Dentistry upon the basis of academic standing and financial need
 Where tenable - University of Toronto

Name - T. Howard Graham Bursary
 Value - \$100.00
 Number - one
 Duration - one year
 Conditions - awarded to a student of the third year who has obtained high standing in Operative Dentistry in second year, and demonstrates financial need
 Where tenable - University of Toronto

Name - The Ed. Green Bursary
 Value - \$100.00
 Number - one
 Duration - one year
 Conditions - awarded to a third year student who, having obtained an average of at least 66% in second year, is in financial need and has demonstrated proficiency in the subject of Operative Dentistry.
 Where tenable - University of Toronto

Name - Ladies' Auxiliary to the Hamilton Academy of Dentistry.
 Value - \$200.00 - \$500.00 each
 Number - one or more
 Duration - one year
 Conditions - awarded to student(s) with satisfactory academic record and character who demonstrates financial need. Student must have attended secondary school in Hamilton, Burlington, Dundas, Ancaster, Saltfleet or Waterdown.
 Where tenable - any University Faculty of Dentistry in Canada.

Name - The Posen and Farie Bursary
Value - \$100.00
Number - one
Duration - one year
Conditions - awarded to a student in fourth year with 66% in third year who has demonstrated ability in Prosthodontics and has proved financial need.
Where tenable - University of Toronto.

DENTAL HYGIENISTSUMMARYA. EDUCATION AND TRAINING

1. Length of educational program 2 years (combined theory and practice)
2. Length of training program none
3. Kind of program diploma in Dental Hygiene
4. Number of programs one in Ontario, University of Toronto, School of Dentistry, Division of Dental Hygiene.
5. Availability of additional training certificate in Public Health if applicant has a B.A. degree.
6. Admission requirements Ontario Grade 13, average of at least 60% with subject requirements; females only (this requirement in process of being amended).
7. Fees academic fee \$420.00 per academic year.
8. Availability and amount of bursary assistance Ontario Department of Health: \$1,400 or \$1,800 + tuition available for one year. Return of service required - no other bursary assistance listed in calendar.

B. OCCUPATIONAL STATUS

1. Manpower data (est.) number employed - 250
average annual infusion - 45
average annual attrition - 8 - 10%
2. Place of employment dental offices, clinics, schools, public health agencies.
3. Primary function performs certain dental operations (e.g. prophylactic treatments, scaling, polishing, charting, application of caries preventive agents); also educational counselling in home care of mouth.

4. Basis of employment	under supervision and direction of a dentist.
5. Initial salary range	employer - dentist usually guarantees \$75.00 per week for 3-4 months. After 3-4 months either (a) basic salary and percentage or (b) straight salary \$90.00 - \$125.00 per week.
6. Certification	none
7. Registration	registration mandatory under the Dentistry Act.
8. Licensing body	Royal College of Dental Surgeons of Ontario (licensure mandatory).
9. Professional organization	Canadian Dental Hygienists Association

DETAILA. EDUCATION AND TRAINING:

The dental hygienist in Ontario must complete a 2 year educational program which combines the study of theoretical and practical aspects of dental hygiene. Upon completion of this program the student is awarded a Diploma in Dental Hygiene. At present, the only university in Ontario which offers this course is the University of Toronto (School of Dentistry, Division of Dental Hygiene). Admission requirements are Ontario Grade 13 (4 subjects comprising 7 credits, with some subject specialization requirements, and an average of at least 60 per cent). At present, only females are admitted into this course, although this regulation is in the process of being revised. Fees for this program of study are \$420.00 per academic year.

Government bursary assistance is available for one year in amounts of \$1,400.00 (to students without dependents), or \$1,800 (to students with dependents). A return of service is required upon completion of the educational program.

B. OCCUPATIONAL STATUS:

There are approximately 250 dental hygienists employed in Ontario (September 1968). The average annual infusion into the profession is estimated to be 45, and the average annual attrition 8 - 10 per cent.

Dental hygienists may be employed in dental offices, dental clinics or schools. They are required to perform certain dental operations on patients such as prophylactic treatments, scaling, polishing, charting and application of caries preventive agents. Dental hygienists also have been traditionally concerned with matters pertaining to educational counselling and home care of the mouth. The dental hygienist performs her duties under the supervision and direction of a dentist.

When he employs a dental hygienist, a dentist usually guarantees his employee a salary approximating \$75.00 per week for the first 3 or 4 months of employment. After this initial period, the hygienist may either (a) receive a basic salary plus a percentage (depending on the number of patients and type of work done), or (b) receive a straight salary of \$90.00 to \$125.00 per week. Recently, the trend appears to be for hygienists to receive a straight salary.

Registration and licensing of dental hygienists is mandatory in Ontario under the Dentistry Act. The licensing body is the Royal College of Dental Surgeons in Ontario. The voluntary organization of the profession is the Canadian Dental Hygienists Association (Ontario Branch).

DENTAL TECHNICIANSUMMARYA. EDUCATION AND TRAINING

1. Length of educational program)
2. Length of training program)
3. Kind of program
4. Number and setting of programs
5. Availability of additional training
6. Admission requirements
7. Fees
8. Bursary assistance

EITHER 3 year educational and training program OR laboratory apprenticeship program of at least 4 years.

diploma (George Brown College of Applied Arts and Technology).

one combined educational-training program (George Brown College of Applied Arts and Technology). Apprenticeship programs in most dental laboratories.

no additional formal training available.

George Brown requires Grade 12; apprenticeship programs prefer Grade 12 but may accept Grade 10 or 11.

George Brown, \$175.00 per academic year for 3 years.

no assistance for George Brown program. Students paid regular salary in apprenticeship program.

B. OCCUPATIONAL STATUS

1. Manpower data (est.)
2. Place of employment
3. Primary function
4. Basis of employment

number employed - 600.

dental laboratories.

alters, repairs or makes artificial prosthetic devices used by dentists.

prescription or direct assistance.

5. Initial salary range variable \$3,000.00 to \$5,000.00

6, Certification, registration and
7 licensing registration optional
8 under Dental Technicians
Act by Governing Board
of Dental Technicians.

9. Professional organization Dental Laboratories
Association of Ontario.

DETAILA. EDUCATION AND TRAINING

There are two possible ways in which a dental technician may be trained in Ontario. He may enrol in a three-year combined educational and training program at the George Brown College of Applied Arts and Technology, Toronto. Admission to this course of instruction requires that the student hold an Ontario Secondary School Graduation Diploma, with related options. Persons over 19 years of age who do not meet this requirement may, under certain circumstances, be admitted as mature students. Fees for this program are \$175.00 per academic year. A diploma is awarded on completion of this three-year program.

As an alternative to this course of study, the student of dental technology may enter an apprenticeship program (usually of at least 4 years' duration) under the instruction of a registered dental technician, in a dental laboratory. Students are sometimes accepted for training in an apprenticeship program with Grade 10 or 11 education, although Grade 12 is usually preferred, and is required for registration.

There is no bursary assistance available for the program offered at George Brown College; and bursary assistance is not offered students in apprenticeship programs, as they are paid a regular salary of approximately \$50.00 per week while they are being trained.

The Dental Laboratories Association of Ontario promotes educational programs to benefit its members. These, however, are informal programs and do not lead to advanced certification. There are no additional formal training programs offered for dental technicians in Ontario.

B. OCCUPATIONAL STATUS

Dental technicians of whom there are approximately 600 employed in Ontario, work in dental laboratories and in some dental offices. Their primary function is to alter, repair or make artificial prosthetic devices used by dentists, such as dentures, bridgework, inlays, crowns, metal clasps, or appliances for the straightening of teeth.

Technicians do their work at the request of their dentist-clients, and in this sense are dependent on dentists for their work. They do not, however, work under supervision or direction of a dentist, and may, therefore, be considered independently-operating workers providing a service to the dentists for whom they work.

The salary which a dental technician may expect varies. Technicians beginning in an apprenticeship program may receive \$50.00 per week or less, while a registered technician may receive over \$100.00 per week depending on the number of clients he has, the type of laboratory in which he is employed, and the type and quality of his work.

Registration of dental technicians in Ontario is optional. In order to be registered, a technician must be 21 years of age, have successfully completed Grade 12 or equivalent, have served in Ontario as a dental technician for a period of at least four years, and passed the Examinations of the Governing Board of Dental Technicians. These regulations are provided for under the Dental Technicians Act, 1946; amended 1963.

An individual may practice as a dental technician without being registered, but he may not call himself a registered dental technician, and he may not own or operate his own laboratory.

Dental technicians may become members of the Dental Laboratories Association of Ontario.

DENTAL ASSISTANT

SUMMARY

A. EDUCATION AND TRAINING

1. Length of educational program))
2. Length of training program)
3. Kind of program
4. Number and setting of programs
5. Availability of additional training
6. Admission requirements
7. Fees
8. Bursary assistance

Combined education and training program 6 months evening program or as part of 2 year (Grade 11-12) academic program.

certificate (Certified Dental Assistant)

3 collegiate courses, courses in various centres offered by dental societies.

none

grade 10 minimum; secondary school graduation preferred. Business course and/or nursing training an asset.

no fees for collegiate courses.

none N/A

B. OCCUPATIONAL STATUS

OCCUPATIONAL SERIES

1. Manpower data (est.)
2. Place of employment
3. Primary function
4. Basis of employment
5. Initial salary range
6. Certifying body

number employed - 4,000

dental offices, clinics, hospitals, public health service agencies.

preparation of instruments and materials, reception and secretarial duties; developing X-Ray films; keeping records and accounts; ordering supplies.

under direction and supervision
of dentist.

\$2,600.00 - \$3,150.00 per annum.

Ontario Dental Nurses' and
Assistants' Association, and
Royal College of Dental Surgeons
of Ontario (jointly)

7. Registration none
8. Licensing body none
9. Professional organization Ontario Dental Nurses' and Assistants' Association.

DETAILA. EDUCATION AND TRAINING

The combined educational and training program which the dental assistant in Ontario is required to complete, may be taken in either a six-month evening program offered by various dental societies in the province, or as part of a two year (Grade 11 and 12) academic program at one of three collegiates in Ontario. (West Hill Collegiate, Etobicoke Collegiate, & Lorne Park Collegiate). Approximately half of the student's curriculum consists of courses pertinent to dental assisting; the other half to regular academic subjects.

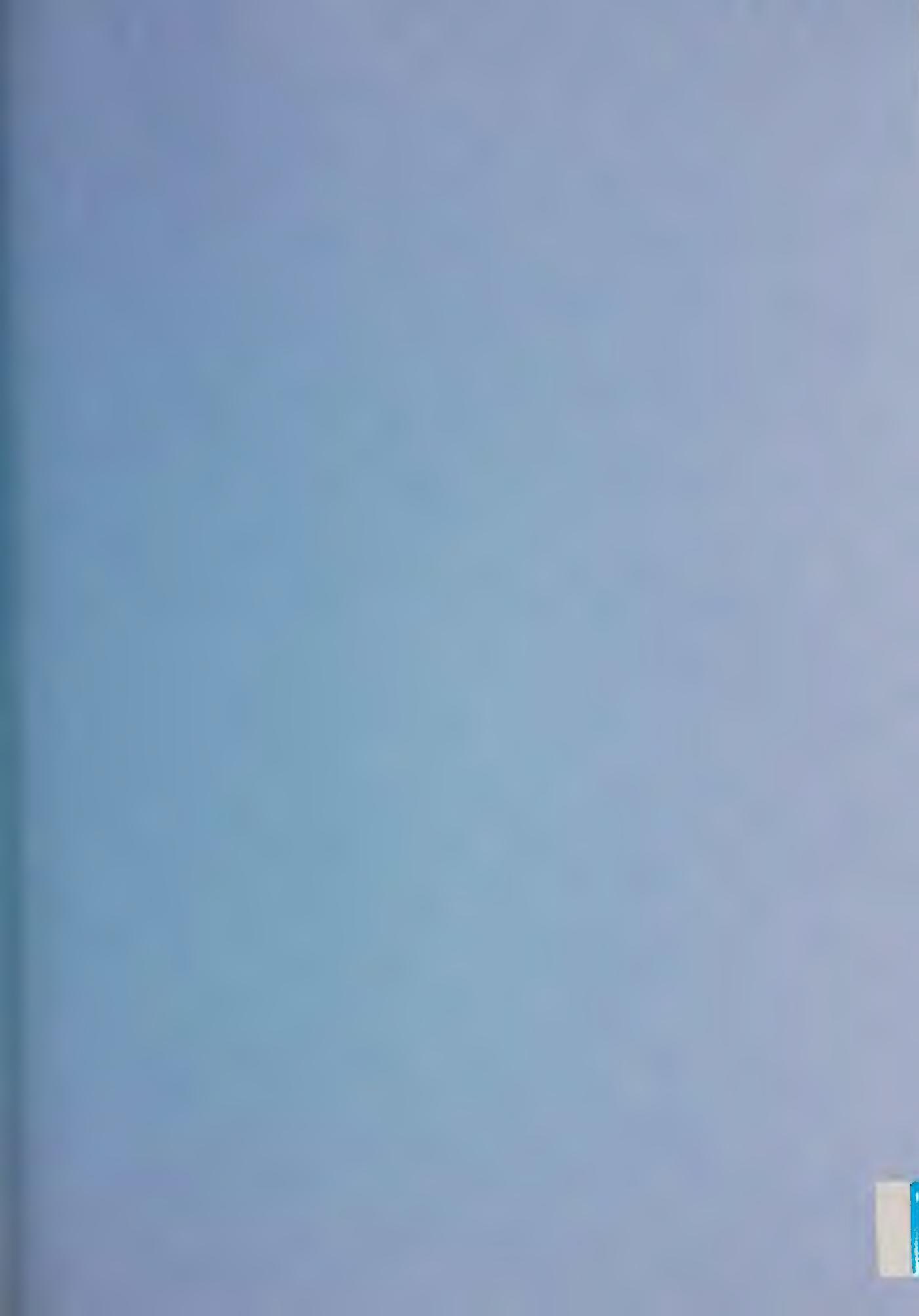
The evening course is open to persons employed in dental offices who have not had formal training as dental assistants. A minimum of Grade 10 education is required for acceptance into this program. A student taking one of the collegiate courses is awarded a Secondary School Graduation Diploma at the end of Grade 12. After a minimum of six months' experience in a dental office, following completion of a recognized dental assisting course, the student may make application to the Ontario Dental Nurses' and Assistants' Association for a certificate as Certified Dental Assistant. The certificate is issued jointly by The Ontario Dental Nurses' and Assistants' Association and the Royal College of Dental Surgeons of Ontario.

There are no fees for these courses; and there is no bursary assistance. No additional training for dental assistants is available beyond the certificate level.

B. OCCUPATIONAL STATUS

There are an estimated 4,000 dental assistants employed in Ontario (September, 1968). Dental assistants may be employed in dental offices, clinics, hospitals, or public health agencies. Their primary function is the preparation of instruments and materials for use by the dentist, reception of patients, secretarial duties, developing X-Ray films, keeping records and accounts, and ordering supplies for the dentist. Duties are carried on under the direction and supervision of a dentist. The initial salary range of the dental assistant is \$2600 - \$3150.00 per annum.

There is no registration or licensing of dental assistants in Ontario. They may, however, be certified by the Ontario Dental Nurses' and Assistants' Association, and the Royal College of Dental Surgeons of Ontario (jointly) after completing an approved program for dental assistants and completing a minimum of six months' employment in a dental office. Dental assistants may also belong to the Ontario Dental Nurses' and Assistants' Association.



CLINICAL CHEMISTSUMMARYA. EDUCATION AND TRAINING

1. Length of educational program

variable. 4-9 years depending on number and kind of degrees.

2. Length of training program

minimum of three years' experience in a recognized clinical chemistry laboratory required for C.S.C.C. Certification.

3. Kind of program

may be M.D., Ph.d., M.Sc., B.Sc., or combination of two or more of these. (see appendix II for breakdown of CSCC membership).

4. Number and setting of programs

M.D. : Ottawa, Queen's, Toronto, Western

Ph.D. with special training in clinical chemistry: Toronto, Western.

5. Availability of additional training

- (a) R.C.P.S. fellowship programs in Medical Biochemistry at Toronto, Western.
- (b) 2-year diploma course in Clinical Chemistry offered by U. of T., Faculty of Medicine, Post-graduate Division.
- (c) Post-doctoral training courses in Clinical Chemistry (no degree or diploma awarded) offered at Western.

6. Admission requirements

variable depending on kind of degree and educational institution attended. See "Detail"

7. Fees

\$450.00 - \$730.00 per academic year depending on kind of program and educational institution attended.

8. Bursary assistance

see Appendix I

B. OCCUPATIONAL STATUS

1. Manpower data (est.)

number employed - 60-70

2. Place of employment

majority of clinical chemists employed in chemistry departments of hospitals. May also be employed in research, government or commercial laboratories.

3. Primary function

supervision of clinical chemistry department and research laboratories; consultation with and assistance to professional staff re solution of problems of a biochemical nature. Most clinical chemists also have teaching responsibilities.

4. Basis of employment

generally works independently but, in hospitals, is usually responsible to a Director of Laboratories (usually a clinical pathologist).

5. Initial salary range

varies considerably depending on educational qualifications and amount of experience and responsibility. Initial range between \$8,000.00 and \$22,000.00 per annum.

6, 7, 8. Certification, registration and licensing

no legal certification, registration or licensing of clinical chemists. Certification by Canadian Society of Clinical Chemists optional.

9. Professional organization

Canadian Society of Clinical Chemists.

DETAILA. EDUCATION AND TRAINING

Clinical chemists may possess degrees in Chemistry, in Medicine, or in both Chemistry and Medicine. Of the 52 full members of the Canadian Society of Clinical Chemists (as of March, 1967) 26 hold M.D. and/or Ph.D. degrees; 9 hold M.A. or M.Sc. degrees; and 17 hold B.A. or B.Sc. degrees. (see Appendix II). The minimum educational requirement for full membership under the Constitution of the C.S.C.C. is an honours chemistry degree from a recognized Canadian university, or equivalent.

The general M.D. degree does not provide adequate training in Clinical Chemistry, and physicians who are employed as clinical chemists usually have special training in clinical chemistry or chemical pathology. Certification by the CSCC requires that a physician complete courses in biochemistry and/or pathological chemistry at the post-graduate level, and have adequate training in analytical, organic and physical chemistry.

As the educational backgrounds of clinical chemists are so diverse, the length of their education varies greatly. A clinical chemist may have a B.Sc. degree in Chemistry (four years following completion of Ontario grade 13), or he may possess an M.D. degree plus a Fellowship in Medical Biochemistry in the Royal College of Physicians and Surgeons, which would require approximately 11 years of education beyond Ontario grade 13. The length of the educational program which must be completed by the clinical chemist, therefore, varies from 4 years to 11 years following completion of Ontario grade 13.

Most clinical chemists with the requisite education in Chemistry/Biochemistry, obtain their training as clinical chemists through practical experience in a clinical chemistry laboratory. A minimum of 3 years' experience in a recognized laboratory is required for C.S.C.C. certification.

Educational programs leading to M.D. degrees are offered in Ontario by the University of Ottawa, Queen's University, the University of Toronto and the University of Western Ontario. Ph.D. degrees, with special training in Clinical Chemistry, are offered by the University of Toronto and the University of Western Ontario. Other programs at both undergraduate and post-graduate levels are available at McMaster University, the University of Toronto, the University of Waterloo and the University of Western Ontario.

In addition to these programs, advanced training in Clinical Chemistry is also available in Ontario. The Faculties of Medicine at the University of Toronto and the University of Western Ontario offer programs in Medical Biochemistry which are approved for Specialist Certification and Fellowship by the Royal College of Physicians and Surgeons of Canada. Secondly, a two-year diploma course in Clinical Chemistry is offered by the University of Toronto, Faculty of Medicine (Postgraduate Division). This course is under the supervision of the Department of Pathological Chemistry, and has been accepted by the C.S.C.C. as adequate preparation for eligibility to sit the C.S.C.C. Certification examinations. Thirdly, post-doctoral courses in Clinical Chemistry are available at the University of Western Ontario. No diploma or degree is awarded on completion of these courses, however, and completion of the courses does not necessarily satisfy requirements for certification by the C.S.C.C.

Admission requirements for the basic (B.Sc., M.Sc., Ph.D., M.D.) programs vary considerably depending upon the course of study and the educational institution attended.

Admission to the four-year professional courses in Medicine requires completion of either a two-year pre-medical program, OR completion of a degree program acceptable to the Faculty of Medicine, OR completion of the second year of a General Science program, all with suitable options and acceptable academic standing. Academic fees for programs in medicine range from \$625.00 per academic year at Queen's to \$730.00 per academic year at the University of Western Ontario.

Ph.D. programs in Ontario which include special training in Clinical Chemistry are offered at the Universities of Toronto and Western Ontario. Admission to graduate programs at these universities requires that the applicant hold a B.A. degree in Chemistry with acceptable academic standing. Fees for these graduate programs are \$435.00 per academic year at the university of Toronto and \$137.00 per term at the University of Western Ontario.

Bursary assistance is available to both medical and non-medical students at undergraduate and graduate levels of study. Appendix I contains a listing of financial assistance available to Chemistry students at the graduate level. For information regarding financial assistance available to students of Medicine, see Appendix I of the information profile "Physician".

B. OCCUPATIONAL STATUS

At the present time there are estimated to be between 60 and 70 clinical chemists employed in Ontario. Some of them occupy teaching posts in universities, and some are employed in government, commercial or research laboratories. Usually, however, clinical chemists are employed in the Chemistry Departments of hospitals.

Clinical Chemistry is the application of chemistry to the human body in order to assist the medical profession in the prevention, diagnosis, management and cure of disease. It is the practice of chemistry as related to medicine, and may also be referred to as "pathological chemistry", "chemical pathology", "clinical biochemistry", or "hospital biochemistry".

The primary functions of the clinical chemist are the supervision of the Clinical Chemistry Department; the supervision of the biochemical research laboratories in his department; and the carrying out of specific research projects. He also consults with the medical staff regarding the solution of specific problems of a biochemical nature, provides assistance of a chemical nature to other professional staff of the hospital and usually has some responsibility in the teaching of clinical chemistry to residents, staff, medical technologists and/or nurses.

The clinical chemist generally works independently; in a hospital, however, he is usually responsible to the Director of Laboratories (usually a Clinical Pathologist). The degree of freedom given to the clinical chemist is dependent upon his educational background and the amount of experience he has had in the field.

Because of the diversity of training and education among clinical chemists, their initial salary range is broad. A clinical chemist with a B.Sc. degree and 2-3 years' experience could expect to receive \$8,000.00 to \$9,000.00 per annum; a clinical chemist with a Ph.D. plus 2-3 years' experience, \$15,000.00; and a clinical chemist with an M.D. degree plus post graduate training (M.A. or Ph.D.) not less than \$23,000.00 - \$25,000.00.

There is no registration or licensing of clinical chemists in Ontario. Clinical chemist may, however, be certified by the Canadian Society of Clinical Chemists. Certification is optional. The certification examinations will be conducted in March 1969, and successful candidates will be the first clinical chemists certified by examination. Other C.S.C.C. requirements for certification in clinical chemistry are as follows:

(a) full membership in the C.S.C.C.; (b) educational qualifications in chemistry or the biological sciences equivalent to the requirements for a Ph.D. or D.Sc. degree OR an M.D. degree and successful completion of courses in biochemistry and/or pathological chemistry at the post-graduate level, and adequate training in analytical, organic and physical chemistry; (c) 3 years' full-time experience in a responsible position in a laboratory maintaining a standard in Clinical Chemistry acceptable to the Committee; OR completion of 2 years' training in a post-doctoral fellowship program approved by the Certification Committee; OR tenure, for a period, of 5 years or more, of professional rank (assistant professor or above) in biochemistry, biological chemistry, clinical chemistry, pathological chemistry, toxicological chemistry or biological assay, in a college or university acceptable to the Committee. Applicants without full requirements who have been practising Clinical Chemistry for 10 years or more may be considered eligible for examination for certification at the discretion of the Committee.

The professional organization to which clinical chemists may belong (and to which certified Clinical Chemists must belong) is the Canadian Society of Clinical Chemists. There are no provincial societies, although in November 1967, a steering committee was formed to explore the various aspects of establishing an Ontario Society of Clinical Chemists. It is expected that an Ontario Society will be formed in the near future.

APPENDIX I

Bursary Assistance Available to Students of
Clinical Chemistry *

Name - Canadian Industries Limited Fellowships
 Field of Study - Doctoral level in Chemistry, Chemical Engineering, Metallurgy, Agriculture.
 Value - \$2,000.00 + \$400.00 to the institution
 Number - 17 (distributed among various fields of study)
 Duration - one year; renewable to two.
 Conditions - open to university graduates who are Canadian citizens or who intend to follow a career in Canada.
 Where tenable - (in Chemistry): McMaster, Ottawa, Queen's, Toronto, Western Ontario.

Name - Canadian Kodak Fellowships
 Field of Study - Physics, Chemistry or Chemical Engineering
 Value - academic and laboratory fees + \$2,000 without or \$2,500 with dependents + \$1,000 to the institution
 Number - one per year
 Duration - one year
 Conditions - awarded to a Canadian male student entering his final year of study toward Ph.D. degree. Awarded on basis of ability, technical promise and character.
 Where tenable - University of Toronto

Name - Chemcell Limited Fellowships
 Field of Study - Chemistry, Engineering, Physics or Mathematics
 Value - \$2,500 annually + \$1,000 to institution
 Number - six annually
 Duration - up to three academic years
 Conditions - available to Canadian residents who are graduates of a Canadian University or College which is a member, or affiliated to a member, of the Association of Universities and Colleges of Canada.
 Where tenable - any university meeting the above conditions

Name - The Chemical Institute of Canada - Ogilvie Flour Mills Co. Limited Fellowships
 Field of Study - physical biochemistry, Colloidal chemistry of biological materials or natural products chemistry.
 Value - \$2,400 first year; \$3,000 each subsequent year holder is proceeding to a doctorate degree + \$500 annually to the institution
 Number - one

* Note: Financial assistance listed here is for graduate students in Chemistry only. Individuals wishing to pursue medical degrees as preparation for clinical chemistry should consult publications listing assistance for medical students.

Duration - maximum 4 academic years
 Conditions - awarded to graduate of Canadian University proceeding to advanced degree at a Canadian university or other accredited post-graduate institution
 Where tenable - as above.

Name - The Dow Chemical of Canada Limited Post Graduate Fellowship
 Field of Study - Chemistry or chemical engineering
 Value - \$1200 for academic term + additional \$800 if research carried on during summer months + maintenance grant of \$500 to the university.
 Number - 2
 Duration - one year; renewable for one additional year.
 Conditions - open to any British subject who is a graduate of a recognized university or college in honours Chemistry or Chemical Engineering
 Where tenable - University of Western Ontario; McMaster University

Name - University of Ottawa Demonstratorships and Research Assistantships in Pure Science
 Field of Study - Biology, Chemistry, Geology, Mathematics, Physics
 Value - up to \$3,300 per year
 Number - 90
 Duration - one year subject to reappointment
 Conditions - open to students having a B.Sc. degree and proceeding to M.Sc. or Ph.D.
 Where tenable - University of Ottawa

Name - University of Toronto - The L.V. Redman Fellowship in Chemistry
 Value - \$1200
 Number - one
 Duration - one academic year
 Conditions - preference given to graduates of institutions other than University of Toronto proceeding toward an advanced degree in Chemistry
 Where tenable - University of Toronto

Name - University of Western Ontario - Dow Chemical of Canada Limited Postgraduate Fellowship
 Field of Study - Chemistry or Chemical Engineering
 Value - \$1200 for the academic term and \$800 if research carried on during summer months.
 Number - one
 Duration - one academic year; renewable
 Conditions - open to graduate of any recognized university in Honour Chemistry or Chemical Engineering
 Where tenable - University of Western Ontario.

APPENDIX IIMEMBERSHIP OF THE CANADIAN SOCIETY OF CLINICAL CHEMISTS (MARCH 1967)*

Category	Ontario	Canada excluding Ontario	Total
Honourary	1	1	2
Full	52	125	177
Associate	25	18	43
Total	78	144	222
Members holding Society Certification	13	44	57

EDUCATIONAL BACKGROUND OF FULL MEMBERS*

Degree(s)	Ontario	Canada excluding Ontario	Total
M.D., Ph.D.	9	10	19
M.D., M.A. or M.Sc.	2	6	8
M.D., B.A. or B.Sc.	2	5	7
M.D.	1	13	14
Ph.D.	12	51	63
M.A. or M.Sc.	9	18	27
B.A. or B.Sc.	17	22	39

* Tables taken from the Brief submitted to the Committee on the Healing Arts by the Canadian Society of Clinical Chemists.

DIETITIANSUMMARYA. EDUCATION AND TRAINING

1. Length of educational program
2. Length of training program
3. Kind of program
4. Number and setting of programs
5. Availability of additional training
6. Admission requiremtns
7. Fees
8. Bursary assistance

3 or 4 years following Ontario grade 13.

12 month internship following completion of academic program.

degree: B.A. in Home Economics, OR B.H.Sc., OR B.Sc. (Food Sciences).

four in Ontario: University of Guelph, University of Ottawa, University of Toronto, University of Western Ontario.

University of Toronto offers M.Sc. in Food Sciences; University of Guelph offers M.Sc. and Ph.D. in some areas of Foods and Nutrition.

Ontario grade 13 (4 subjects comprising at least 7 credits; 60% overall average). University of Ottawa also admits students following completion of post-grade 12 pre-university year.

tuition fees range from \$475.00 - \$515.00 per academic year.

see appendix I.

B. OCCUPATIONAL STATUS

1. Manpower data (est.)
2. Place of employment
3. Primary function

number employed - 275

hospitals, public institutions, restaurants, hotels, schools, business organizations, welfare agencies, government departments.

provides education in nutrition and its relation to good health; educates medical and paramedical groups on nutrition in health and disease; interprets physicians' diet orders and explains diet regime to those for whom these have been ordered; prepares and distributes literature on health and nutrition; administers the activities of a food service department or a part thereof.

4. Basis of employment	generally works independently, but may work from prescription by physician. Functions within policies of employing organization.
5. Initial salary range	\$6300.00 - \$6800.00 per annum.
6, 7, 8. Certification, registration and licensing	registration optional under "An Act Respecting the Ontario Dietetic Association" by the Ontario Dietetic Association.
9. Professional organization	Canadian Dietetic Association and the Ontario Dietetic Association. Members must be registered dietitians.

DETAILA. EDUCATION AND TRAINING

To be registered in Ontario, the dietitian must have completed (a) a program of study of 3-4 years' duration following completion of Ontario grade 13, and (b) a 12 month internship in an approved setting following completion of the 3 or 4 year educational program. This degree may be a B.A. in Home Economics, a B.H.Sc. or a B.Sc.(Food Sciences) depending upon the university attended.

There are four universities in Ontario which offer programs of study leading to these degrees. They are the University of Guelph, the University of Ottawa, the University of Toronto and the University of ~~Western~~ Ontario. Admission to these programs requires that the student have completed Ontario grade 13 (4 subjects comprising 7 credits) with an overall average of at least 60%. The University of Ottawa also admits students who have successfully completed a pre-university year following graduation from grade 12.

Tuition fees for these programs range from \$475.00 - \$515.00 per academic year. Bursary assistance is available to students of Food Sciences (Home Economics or Household Science). For details see appendix I. During the 12 month internship, the student is provided with a living allowance of \$275.00 per month.

Advanced education and training is also available to dietitians in Ontario. The University of Toronto offers a M.Sc. in Food Sciences and the University of Guelph offers M.Sc. and Ph.D. degrees in some areas of Foods and Nutrition.

B. OCCUPATIONAL STATUS

At the present time there are an estimated 275 dietitians employed in Ontario. They may be employed in hospitals, public institutions, restaurants, hotels, schools, business organizations, welfare agencies, government departments and other organizations concerned with or related to the preparation and dissemination of nutrition information or the preparation and serving of food in large quantities.

In these settings the dietitian's functions may vary greatly. In hospitals she may work in an administrative capacity, responsible for the entire food service department, the family practice unit or the School of Nursing. She may serve as a nutritional or operational researcher in the clinical investigation unit, or in the food service operation, or as a therapeutic dietitian working directly with patients, nursing and medical staff.

Dietitians are employed by some associations concerned with certain diseases such as diabetes and heart diseases, and in this capacity are involved with the preparation and dissemination of related literature, and in counselling on nutrition related to these diseases. They are also employed by government and private agencies for the preparation and dissemination of literature related to normal nutrition and health.

In restaurants, hotels and schools, their main function is to administer the food service program in such a way as to provide healthful, appetizing food, prepared under hygienic conditions.

The dietitian generally works independently, although she may work from a prescription supplied by a physician if she is working directly with patients, nursing and medical staff.

The initial salary of the dietitian ranges between \$6300.00 and \$6800 per year. The experienced dietitian in a senior position may expect to receive an annual salary of over \$10,000.00 per year.

Dietitians in Ontario may be registered under the Ontario Dietetic Association Act, 1958, by the Ontario Dietetic Association. Registration requires that the applicant provide (a) evidence of good character and professional reputation; (b) evidence of membership in good standing in the Canadian Dietetic Association; (c) proof of completion of an academic program acceptable to the Board; (d) proof of completion of an approved internship or equivalent, approved by the Board. Registration is optional. Only registered dietitians, however, are permitted to represent themselves as "Registered Professional Dietitians" and to use the designation R.P. Dt. And only registered dietitians may become active members of the Canadian Dietetic Association and the Ontario Dietetic Association.

FINANCIAL ASSISTANCE AVAILABLE TO DIETICIANS IN ONTARIO

Name - Hamilton Home Economics Association Bursary
 Value - \$100.00
 Number - one each year
 Conditions - awarded to a worthy student from Hamilton or district in degree programme in Household Science as chosen by the Macdonald Institute Scholarship Committee.
 Where Tenable - Macdonald Institute, Guelph

Name - Frontenac County Scholarship
 Value - \$200.00
 Number - one annually
 Conditions - candidates considered on 4-H and Junior Farmer participation, academic standing, community activities and personal qualifications.
 Where Tenable - Macdonald Institute

Name - Haldimand County Council Scholarship
 Value - \$200.00
 Number - one annually
 Conditions - awarded to resident of County of Haldimand
 Where tenable - Macdonald Institute

Name - Halton County Federation of Agricultural Scholarships
 Value - \$100.00
 Number - two annually
 Conditions - award made on the basis of academic standing, 4-H Club Junior Farmer or community activities.
 Where Tenable - Macdonald Institute

Name - Kingston Kiwanis Club Scholarship
 Value - \$100.00
 Number - One annually
 Conditions - awarded on the basis of 4-H participation, academic standing, community activities and personal qualifications.
 Where Tenable - Macdonald Institute

Name - Kiwanis Club of Forest City Scholarship
 Value - \$400.00
 Number - one annually
 Conditions - awarded to a student from Middlesex County. \$100.00 paid each year so long as recipient maintains academic average of 66% and is a well-integrated student on campus. Awarded on basis of scholastic achievement, interest, background and participation in agricultural and student activities during high school.
 Where Tenable - Macdonald Institute

Name - Lennox and Addington Cheese Producers' Scholarship
 Value - \$100.00
 Number - one
 Conditions - awarded to a student from Lennox and Addington County
 who has participated in 4-H and community activities.
 Academic standing also considered.
 Where tenable - Macdonald Institute

Name - Norfolk County Women's Institute Scholarship
 Value - \$100.00
 Number - one
 Conditions - awarded annually to a Norfolk girl entering Macdonald
 Institute; preference to girl with Women's Institute
 affiliation.
 Where tenable - Macdonald Institute

Name - Oxford County Bursary
 Value - \$200.00
 Number - one
 Conditions - awarded to a student from Oxford County entering the
 first semester at O.A.C. or Macdonald Institute
 Where tenable - Macdonald Institute

Name - Oxford County Women's Institute Bursary
 Value - \$100.00
 Number - one annually
 Conditions - awarded to a student entering degree program at O.A.C.
 or Macdonald Institute on basis of "all round" worthiness
 and scholastic standing.
 Where tenable - Macdonald Institute

Name - Henry A. Sharpe Memorial Scholarship - Peterborough County
 Value - \$300.00
 Number - one
 Conditions - awarded to student in Peterborough County on basis of 4-H
 participation, Grade 13 standing, personality, leadership,
 character and citizenship.
 Where tenable - Macdonald Institute.

Name - Wellington County Scholarships
 Value - \$100.00
 Number - three
 Conditions - awarded to worthy rural students from the County of
 Wellington.
 Where tenable - Macdonald Institute

Name	- Christina Anne Smith Memorial Scholarship
Value	- \$600.00
Number	- one
Conditions	- awarded to resident of Wentworth County with 66% Grade 13 average in 7 subjects. Paid over period of 4 years provided academic standard maintained.
Where tenable	- Macdonald Institute
Name	- Agincourt Milk Producers' Association Scholarship
Value	- \$275.00
Number	- one
Conditions	- awarded to a student from a farm family in York or Ontario County who has completed the 6th semester of H.Sc. Programme with a good academic record and is majoring in Foods and Nutrition.
Where tenable	- Macdonald Institute
Name	- Katherine Fuller Award
Value	- \$100.00
Number	- one
Conditions	- awarded to a student entering the 3rd or 5th semester at Macdonald Institute who needs assistance and whose academic standing is acceptable.
Where tenable	- Macdonald Institute.
Name	- H.H. Harshman Foundation
Value	- Total value to \$3,000.00 (awarded in years 1964-1969)
Number	- unspecified
Conditions	- awarded to good and deserving students. Preference given to undergraduates.
Where tenable	- Macdonald Institute.
Name	- Margaret Laughlin Mitchell Scholarships
Value	- \$500.00
Number	- Two
Conditions	- awarded to students entering 5th and/or 7th semester in Household Science. The 7th semester student must be majoring in Foods and Nutrition; the 5th semester student must show an interest and high grades in foods and nutrition.
Where tenable	- Macdonald Institute.
Name	- Stoney Creek Women's Institute Bursary
Value	- \$100.00
Number	- one
Conditions	- awarded to a Wentworth County student whose scholastic standing is satisfactory, and who demonstrates financial need.
Where tenable	- Macdonald Institute

Name - Toronto Home Economics Association Scholarship
Value - \$200.00
Number - one
Conditions - awarded to a student residing in the Metro Toronto area, intending to proceed towards the nutrition or textiles option.
Where tenable - University of Toronto

Name - Gertrude and Edith Lowidt Bursary
Value - \$225.00
Number - two
Conditions - awarded to one second year and one third year student with nutrition or textiles option. Eligibility based on academic standing and financial need.
Where tenable - University of Toronto

Name - Canadian Dietetic Association Award
Value - \$200.00
Number - one
Conditions - awarded to a worthy student after completion of her undergraduate studies for assistance in her internship year.
Where tenable - any accredited internship program.

Name - Economics Laboratory (Canada) Ltd. Award.
Value - \$500.00
Number - one
Conditions - awarded to a worthy student in her final under-graduate year.
Where tenable - any school accredited by Canadian Dietetic Association.

SUMMARY**A. EDUCATION AND TRAINING**

1. Length of educational program) combined educational and training program 12 months.
2. Length of training program)
3. Kind of program certificate
4. Number and setting of programs three in Ontario: Ottawa General Hospital; Hotel Dieu Hospital; St. Michael's Hospital.
5. Availability of additional training none in Ontario.
6. Admission requirements applicants must be at least 18 years of age; have Ontario grade 13 or equivalent OR R.N. diploma OR provincial teaching certificate; have typing ability.
7. Fees approximately \$200.00 for 12 month course.
8. Bursary assistance government bursaries available (\$2100.00 or \$2700.00). Return of service required.

B. OCCUPATIONAL STATUS

1. Manpower data (est.) number employed - approximately 200 in Ontario.
2. Place of employment hospitals or clinics.
3. Primary function organizes, manages and/or supervises medical record department. Compiles, maintains and reviews medical records; codes, indexes and files records of diagnoses diseases and treatments; compiles statistics and releases information.
4. Basis of employment functions independently within the policies of the employing organization.
5. Initial salary range \$383.00 - \$460.00 per month.
- 6, 7, 8. Certification, registration and licensing registration by Board of Registration of the Canadian Association of Medical Record Librarians.

9. Professional organization

Canadian Association of Medical
Record Librarians and Ontario
Association of Medical Record
Librarians.

DETAILA. EDUCATION AND TRAINING

The education-training program which must be completed by the medical record librarian in Ontario is of 12 months' duration. Upon completion of this program the student is awarded a certificate and may make application for registration. There are, at present, three such programs in Ontario: one at Ottawa General Hospital; one at Hotel Dieu Hospital, Kingston; and one at St. Michael's Hospital, Toronto. No advanced training programs for medical record librarians are available in Ontario.

Applicants who wish to take the training program for medical record librarians must be at least 18 years of age; have completed Ontario grade 13 or equivalent, OR have an R.N. diploma, OR have a provincial teaching certificate; and have good typing ability. Proficiency in shorthand is preferred but not required.

Fees for this course of study are approximately \$200.00 for the 12 month period. Government bursary assistance is available to students in amounts of \$2100.00 (for students without dependents) or \$2700.00 (for students with dependents). A return of one year of service is required of all recipients.

B. OCCUPATIONAL STATUS

There are estimated to be 200 medical record librarians presently employed in Ontario. All are employed in hospitals or clinics.

In addition to the management of the medical records department, the primary duties of the medical record librarian are to compile and maintain medical records of hospital or clinic patients; to review clinical records; to code and index records of diagnoses, diseases and treatments; to assist the medical staff in research projects and in evaluation of patient care; to compile statistics; and to release information to staff members and authorized agencies. Medical record librarians may also brief and transcribe records, participate in staff meetings representing a professional service, represent the hospital or clinic in court and serve on the hospital's medical record committee.

The medical record librarian functions independently, but within the policies of the employing organization. She may expect an initial salary ranging between \$383.00 and \$460.00 per month (\$4596.00 - \$5520.00 per annum).

Registration of medical record librarians is mandatory and is the jurisdiction of the Board of Registration of the Canadian Association of Medical Record Librarians. In order to be registered, the medical record librarian must apply for membership in the Canadian Association of Medical Record Librarians and the Ontario Association of Medical Record Librarians. After she has been accepted as a member of these associations, she may apply for permission to write registration examinations. Satisfactory standing in these examinations qualifies her to use the initial R.R.L. (Registered Record Librarian) after her name.

SUMMARYA. EDUCATION AND TRAINING

1. Length of educational program none
2. Length of training program variable Usually 4-6 months
3. Kind of program supervised training and instruction. No certificate or diploma awarded
4. Number and setting of programs most hospitals train their own operating room technicians as they are needed.
5. Availability of additional training none
6. Admission requirements trained attendants, nursing assistants, nurses' aides, or applicants with hospital experience best candidates. (Registered Nursing Assistant preferred).
7. Fees none
8. Bursary assistance N/A. Technicians are paid regular salary of approximately \$350.00 per month during training period

B. OCCUPATIONAL STATUS

1. Manpower data (est.) number employed - 400
2. Place of employment hospitals
3. Primary function to assist in care of patients in the operating room; to prepare and maintain supplies and equipment used during surgery; to carry out housekeeping and other miscellaneous duties.
4. Basis of employment functions under the direction and supervision of a registered nurse. Direct assistance to patients.
5. Initial salary range \$349.00 - \$394.00 per month
6. 7. 8. Certification, registration and licensing none
9. Professional organization none

A. EDUCATION AND TRAINING

In Ontario, operating room technicians are generally trained by informal on-the-job instruction and practice which is given to them by professional staff members in the hospitals where they are employed. The training "programs" vary in length depending upon the background and learning ability of the trainee; most operating room technicians, however, can complete the necessary training in 4-6 months.

No certificate or diploma is awarded on completion of training, and no additional training is available to operating room technicians (except continued informal on-the-job training). There are no fees for the training and instruction, and no bursary assistance is required, as trainees are paid a regular salary of approximately \$350.00 per month while they are being trained.

In choosing operating room technician trainees, preference is given to applicants who have previously been, or are presently employed as trained attendants, nursing assistants, nurses' aides, or in other related capacities in a hospital setting. Registered nursing assistants are considered to be the best candidates for such training. Preference also tends to be given to persons between the ages of 18 and 35, and persons who have at least two years of secondary school education.

B. OCCUPATIONAL STATUS

At present there are approximately 400 operating room technicians employed in Ontario. All of them work in hospital settings.

The primary functions of the operating room technician are: (1) to assist in the care of patients in the operating room under the direct and continuous supervision of a registered nurse. Duties in this area include scrubbing for general and specialized surgery, assisting the circulating professional nurse, and assisting the anaesthetist with the transportation of patients to the recovery room. (2) The operating room technician also assists in the care, preparation and maintenance of sterile and unsterile supplies and equipment used during surgery (e.g. preparing linen for sterilization, preparing instruments sets and checking stock supplies.) (3) The technician also assists with housekeeping duties such as cleaning instruments and utensils used during surgery, cleaning theatre furniture and cupboards, and preparing and cleaning anaesthetic equipment. All duties of the operating room technician are carefully supervised by registered nurses.

The initial salary range of the operating room technician ranges between \$349.00 and \$394.00 per month.

There is, at present, no certification, registration or licensing of operating room technicians; and no voluntary professional organization to which they may belong.

INDEXofSELF-GOVERNING PROFESSIONAL BODIES AND VOLUNTARY
PROFESSIONAL ASSOCIATIONSNURSING

Canadian Nurses Association,
50 The Driveway,
Ottawa 4, Ontario.

Canadian Public Health Association,
1255 Yonge Street,
Toronto 289, Ontario.

College of Nurses of Ontario,
10 Price Street,
Toronto 289, Ontario.

International Council of Nurses,
1 Dean Trench Street, Smith Square,
London, S.W.1, England.

Ontario Association of Registered Nursing Assistants
(Sponsorship of R.N.A.O.),
86 Bloor Street West,
Toronto 189, Ontario.

Ontario Public Health Association,
1255 Yonge Street,
Toronto 289, Ontario.

Psychiatric Nurses Association of Ontario,
c/o Mrs. R. Dyson (Secretary),
Apt. 102,
44 Dunfield Avenue,
Toronto 295, Ontario.

Registered Nurses' Association of Ontario,
33 Price Street,
Toronto 289, Ontario.

GENERAL MEDICAL CARE

Ontario Association of Professional Social Workers,
55 York Street,
Toronto 116, Ontario.

Canadian Association of Social Workers,
185 Somerset Street West,
Ottawa 4, Ontario.

Canadian Medical Association,
150 St. George Street,
Toronto 181, Ontario.

Canadian Psychological Association,
391 Richmond Road,
Ottawa 13, Ontario.

College of Physicians and Surgeons of Ontario,
64 Prince Arthur Street,
Toronto 180, Ontario.

Medical Council of Canada,
77 Metcalfe,
Ottawa 4, Ontario.

Ontario Board of Examiners in Psychology,
Box 221, Postal Station F,
Toronto 285, Ontario.

Ontario Medical Association,
244 St. George Street,
Toronto 180, Ontario.

Ontario Psychological Association,
166 Elder Street,
Downsview 475, Ontario.

REHABILITATION MEDICINE

Board of Directors of Physiotherapy,
209 Davenport Road,
Toronto 185, Ontario.

Canadian Association of Occupational Therapists,
57 Bloor Street West,
Toronto 189, Ontario.

Canadian Board of Certification for Prosthetists and Orthotists,
363 Smith Road,
Ottawa 8, Ontario.

Canadian Physiotherapy Association,
64 Avenue Road,
Toronto 180, Ontario.

College of Physicians and Surgeons of Ontario,
64 Prince Arthur Street,
Toronto 180, Ontario.

Interprovincial Association of Prosthetists and Orthotists of Canada,
331 Cooper Street,
Ottawa, Ontario.

Medical Council of Canada,
77 Metcalfe,
Ottawa 4, Ontario.

Ontario Association of Occupational Therapists,
P.O. Box 106,
Ancaster, Ontario.

Ontario Medical Association,
244 St. George Street,
Toronto 180, Ontario.

Ontario Speech and Hearing Association,
80 Gwendolen Crescent,
Willowdale 444, Ontario.

VISUAL CARE

American Orthoptic Council,
4200 N. Woodward Avenue,
Royal Oak, Michigan 48073.

Board of Ophthalmic Dispensers of Ontario,
150 King Street West,
Toronto 105, Ontario.

Canadian Guild of Dispensing Opticians,
150 King Street West,
Toronto 105, Ontario.

Canadian Guild of Dispensing Opticians (Ontario Branch),
150 King Street West,
Toronto 105, Ontario.

Canadian Orthoptic Society,
c/o Miss J. Wem, President,
Hospital for Sick Children,
555 University Avenue,
Toronto 101, Ontario.

College of Physicians and Surgeons of Ontario,
64 Prince Arthur Street,
Toronto 180, Ontario.

Medical Council of Canada,
77 Metcalfe,
Ottawa 4, Ontario.

Ontario Board of Examiners in Optometry,
40 St. Clair Avenue West,
Toronto 195, Ontario.

Ontario Medical Association,
244 St. George Street,
Toronto 180, Ontario.

Optometrical Association of Ontario,
40 St. Clair Avenue West,
Toronto 195, Ontario.

MEDICAL TECHNOLOGY

Board of Radiological Technicians of Ontario,
Box 64,
Brantford, Ontario.

Canadian Association of Electroencephalographic Technicians,
c/o Mr. H. Keogh, President,
Saskatchewan Hospital,
North Battleford,
Saskatchewan.

Canadian Society of Laboratory Technologists,
165 Jackson Street East,
Hamilton, Ontario.

Canadian Society of Medical Technologists (Ontario Branch),
5 Pleasant Drive,
Stratford, Ontario.

Canadian Society of Radiological Technicians,
2175 West 16th Avenue,
Vancouver 9, B.C.

Canadian Society of Radiological Technicians (Ontario Branch),
250 University Avenue,
Toronto 110, Ontario.

PHARMACY

Canadian Society of Hospital Pharmacists,
175 College Street,
Toronto 101, Ontario.

Canadian Society of Hospital Pharmacists (Ontario Branch),
175 College Street,
Toronto 101, Ontario.

Ontario College of Pharmacy,
483 Huron Street,
Toronto 180, Ontario.

Ontario Pharmacists' Association,
175 College Street,
Toronto 101, Ontario.

The Pharmacy Examining Board of Canada,
175 College Street,
Toronto 101, Ontario.

DENTISTRY

Canadian Dental Association,
234 St. George Street,
Toronto 180, Ontario

Canadian Dental Hygienists Association,
c/o Mrs. P. Johnson, President,
8 Hallfield Rd.,
Islington 676, Ontario

Dental Laboratory Association of Ontario,
460 Richmond Street, West,
Toronto 133, Ontario

Governing Board of Dental Technicians,
11a Glen Watford Drive,
Agincourt 740, Ontario

Ontario Dental Association,
230 St. George,
Toronto 180, Ontario

Ontario Dental Hygienists Association,
c/o Miss D. Stokon, President,
8 Prince Arthur Avenue,
Toronto 180, Ontario

Ontario Dental Nurses' and Assistants' Association,
230 St. George Street,
Toronto 180, Ontario

Royal College of Dental Surgeons of Ontario,
230 St. George Street,
Toronto 180, Ontario

HOSPITAL SERVICE

Canadian Association of Medical Record Librarians,
770 Glenforest Street,
Oshawa, Ontario.

Canadian Dietetic Association,
1393 Yonge Street,
Toronto 289, Ontario.

Canadian Society of Clinical Chemists,
5 Rosedale Road,
Toronto 289, Ontario.

Ontario Dietetic Association,
86 Bloor Street West,
Toronto 181, Ontario.

Ontario Association of Medical Record Librarians,
c/o Miss D. McPherson, President,
Medical Records Department,
Hospital for Sick Children,
555 University Avenue,
Toronto 101, Ontario.



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